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CITY AND PORT OF CARDIFF



PUBLIC HEALTH DEPARTMENT ANNUAL REPORT 1971

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Medical Officer of Health

Principal School Medical Officer

Port Medical Officer

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CITY AND PORT OF CARDIFF



PUBLIC HEALTH
DEPARTMENT
ANNUAL REPORT
1971

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CITY AND PORT OF CARDIFF



CENTRAL HEALTH SERVICE

DEPARTMENT OF PUBLIC HEALTH SERVICES

PUBLIC HEALTH DEPARTMENT ANNUAL REPORT 1971

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PUBLIC HEALTH
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1931

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COMMITTEES

(As at December 1971)

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Mr. G. H. EDWARDS

Mr. V. J. SLOMAN

Mr. B. E. EDWARDS

PREFACE

Ladies and Gentlemen,

This Annual Report, although referring to the year 1971, was prepared during the latter part of 1972 and early 1973. It would be wrong, therefore, not to refer first to the tragic death of Alderman W. J. Hartland, C.B.E., O.S.T.J., J.P., F.R.S.H., on 28th June, 1972. Alderman Hartland had served Cardiff City Council for twenty-six years and had been Chairman of its Health Committee for a total of twelve years. During this time he increasingly worked for the improvement of the well-being of the city and was associated with many national bodies in the health services. At various times he had been Chairman of the Health Committee of the Association of Municipal Corporations, Chairman of the Ambulance Services Central Advisory Committee and a member of the Health Education Council. During his final illness he learned that he had been elected to Honorary Fellowship of the Royal Society of Health. His death, particularly in these times of great change within the health services, was most untimely and his wise counsel will be sadly missed.

1971 will go down in history as the year which saw the beginning of the end of the Local Health Authorities as they have been known since 1948. On 1st April of this year the Social Services legislation, which took its origin in the Seeborn Report published about two years earlier, became effective. The Authority welcomed Mr. Vivian Jenkins as its first Director of Social Services and the functions of the Children and Welfare Departments came under the umbrella of the new Department. At the same time certain of the Health Department functions were transferred. These were the Home Help section, the Mental Health section including hostels, and other minor responsibilities such as the registration of nurseries.

The provision of Home Help for the aged and infirm is one of the major services provided by the Authority. There may be little to show for the expenditure involved in terms of bricks, mortar and permanent monuments. Nevertheless, in relation to the easing of domestic stress and the relief afforded to hard pressed hospital services by enabling the aged to continue to live in the community, the reward is great indeed. One can only hope that the Home Help service will continue to flourish within the Social Services empire.

The community mental health services too, have a role of major importance in the provision of support to the mentally ill and their families. The mental welfare officers, most of whom have worked in the field for very many years, have amassed a great expertise in handling the varied problems of the mentally disordered. I remain totally unconvinced of the advisability of separating this expertise from Health Departments. I cannot believe that the generic social workers of the future will acquire this expertise for very many years and in the meantime I seriously doubt whether they will be able to command the respect of the hospital psychiatrists which the specialist workers have enjoyed in the past. I realise that it is not possible to put the clock back and that the changes have now taken place but I shall always contend that this was a hasty and ill-conceived decision of Central Government which will be regretted in the fulfilment of time.

April 1st, 1971, was also the date on which Local Health Authority Training Centres for the mentally subnormal were transferred to other departments. In Cardiff the Adult Training Centre at Pengam passed to the Social Services Department and the Ty Gwyn junior centre to the Education Department. I believe that the Health Department had a good record in the running of both these establishments albeit within the constraints of grossly inadequate accommodation for many years at Pengam. I have no doubt that the excellent service provided by these centres will be maintained within the new departments and I shall refrain, therefore, from enlarging on some personally held reservations and views of scepticism for fear of being accused of 'sour grapes'!

I found Miss Price's talk on the history of the Junior Training Centre most interesting reading and have allowed a very full summary to go into this Report for the sake of posterity.

If 1971 saw the beginning of the end of old style Local Health Authorities it may also be said to have seen the beginning of the new integrated National Health Service

scheduled to come into being on 1st April, 1974. In 1971 we really began in earnest to get down to the job of planning the management details of the new service. Central Government was seeking the views of many professional organisations on a continuing basis. On a personal level I found myself invited to participate in many discussions through the Society of Medical Officers of Health Council, the School Health Service Council, the B.M.A. Public Health Committee, the Association of Sea and Airport Health Authorities, the Public Health Inspectors Education Board and others.

My Deputy, Dr. J. N. P. Hughes, towards the end of the year, was invited by the Welsh Office to join the Study Group which looked into the Management Structure for the Reorganised National Health Service in Wales. As the only public health doctor on the Study Group his commitments to the Group often involved him in several days' work every week. The work was scheduled to continue well into 1972. Dr. Hughes is to be congratulated on being invited to take part in this very important study.

Inevitably the involvement of Dr. Hughes and myself has had a 'spin-off' in that it has imposed extra strains on other members of the Department. This comment applies to both the medical and administrative staff and their willing response should not be allowed to pass unremarked. Their efforts were all the more appreciated since it must be said that morale in the Department was under very heavy pressure throughout the year under review, as uncertainties about the future were fostered by rumour, lack of concrete information, apprehensions about job security and the like.

There is no doubt that these changing times are far from happy ones and one is aware of stress situations developing in individuals which pervade into the very heart of their family lives. Change of the magnitude now upon us may be very necessary and may lead to a great new future for the National Health Service but the process is certainly not without great trauma.

Fortunately during 1971 there were no major staff changes amongst senior personnel though there was considerable mobility amongst lower grade officers. This is a trend which can well be expected to increase, particularly in the Health Department. Those wishing to continue a career in Local Government will attempt to transfer into departments remaining with local authorities, thus avoiding the move across to the new Area Health Authorities.

Turning from the general to the particular, I should like in this preface, to draw attention to a few specific points which are developed in greater detail in the body of this report.

Looking first at the general statistics. There has been a slight fall in the population of the city - from 284,010 to 276,790. During the year the number of deaths, 3,286, was exactly the same as in 1970 and there were 22 fewer births (4,271). These figures show that there has been a population drift out of the city of some 7,200 people and it is interesting to speculate on the causes for this. Is it, perhaps, that cheaper housing in neighbouring county townships is sufficient to compensate for the added expense of commuting in to the city to work? Could it be that there are insufficient job opportunities in the city? I am assured that there is no truth in rumours that naval press gangs and white slave traders are active in Tiger Bay!

The birth rate in the city, which was consistently higher than the England and Wales rate until the middle 60's fell below the national level for the first time in 1966 and has remained lower ever since. Perhaps this is a reflection of the rapid development of family planning services in the city. Cardiff has a reputation for its progressive birth control policy. The Family Planning Association's vasectomy clinic was one of the first of its kind in the country and the Local Authority has responded energetically to the powers vested in it by the 1967 Family Planning Act.

There has been yet another slight rise in the illegitimate birth rate to its highest level ever, 112.1 per thousand live births. I commented in 1970 on this subject in relation to promiscuity. It is now fashionable to talk not of promiscuous behaviour but of changing philosophical attitudes to the nuclear family and indeed to the whole concept of marriage. There are those whose belief in the 'alternative society' is such that they do not believe extra-marital intercourse to be either immoral or promiscuous. They see the development of 'communes' in which several couples live together in general harmony, the pairing not

necessarily remaining constant within the group. The children of such communities or extended families, in theory, develop in an environment in which they have the opportunity to appreciate human interaction, personalities, and varying intellectual viewpoints more fully. Thus, it is suggested that they will grow up as more complete citizens. They will be unfettered by the restraints of the traditional nuclear family where like tends to breed like and the child's attitudes tend to be bridled by the parents' point of view.

Unfortunately most of the communes so far established seem to sink to a level of squalor at an early stage of their existence and the child's 'wide horizon' is obstructed by the mountains of disorganised and untidy household bric-a-brac or clouded by the smoke of cannabis resin. Personally, I prefer my old-fashioned wife and two kids, but who am I to hold back the tide of the brave new world?

Dr. Hughes, in his section on infectious diseases refers to the fact that gonorrhoea has now overtaken measles as the most frequently notified infection. He goes on to refer to the 36% overall increase in gonorrhoea compared with 1970 but points out that as this increase is amongst people mainly in the third decade of life, perhaps our health education would be better directed to this age group. I feel I can take issue with him on this point. In spite of the overall increase the number of gonorrhoea patients aged under 18 years fell in 1971 to 55 from 80 in 1970. This suggests to me that our education programme in schools may indeed be beginning to show returns. Perhaps we shall reap our reward at later ages in a few years' time when the present better informed younger generation grows up.

Education, I am sure, has a most important part to play in the long term control of venereal disease. I do not believe that we will have worthwhile vaccines against either syphilis or gonorrhoea for many years and I foresee great moral arguments raging through the national media if and when they are eventually developed. V.D. immunisation will be seen by many as yet another licence to fornicate coming on top of the pill, the Abortion Act and the broad-mindedness of 'the permissive society'. I cannot see parents consenting to programmes of mass immunisation of pubertal children in schools though I would probably protect my own children in recognition of the facts of modern life. But these decisions are a long time ahead and in the meantime we have a lot of teaching to do if we are to contain the spread of infection.

Notification of infectious disease is an important link in the chain of control but the point has been made often enough that the notifications are far from complete. The very common diseases like measles and the less severe diseases like whooping cough are probably grossly undernotified whereas a case of diphtheria, typhoid or smallpox would be very promptly made known to us. Notification is probably also fairly complete in the fields of venereal disease and in pulmonary tuberculosis, since these are made known through the respective specialist clinics. In the case of V.D. the authority is notified of numbers of cases only, rather than individuals, in order to preserve the confidentiality of the patient in his relationship with the clinic.

The problems of the assessment of handicapped children are referred to by Dr. Bryant. There is need for ever earlier recognition of handicaps so that plans can be made for dealing with them as the child develops. The work of Preswylfa is gone into in some detail by Dr. Bryant and she draws attention to the new 'Play Therapy Groups' which were established during the year at Llanrumney and Trowbridge. Mothers can bring their pre-school handicapped children to these groups so that the children receive stimulation, the parents receive encouragement and support, and the medical and allied staffs can get to know the child and begin to assess the implications of the handicap. I have a great faith in the value of these new play groups and look forward to their expansion in the future. I should like to record my very warm thanks to the South Wales Association for Spina Bifida and Hydrocephalus and to the Cardiff and District Association for Mental Health for their very generous support enabling us to get these projects off the ground.

Perhaps because my wife is a teacher of the deaf (semi-retired), I have a great personal interest in the problems of the deaf child. I read a lot into the single sentence on page 24, '2,034 hearing tests on infants were performed by health visitors, and 7 were found to have significant impairment of hearing.'

Deafness, with its concomitant inability to speak, must surely be one of the worst of all handicaps. The inability to communicate either inwards or outwards leads to all manner of learning deficiencies and frustrations. The child imprisoned in his own world of silence or grotesque and meaningless part-sounds lives in a very personal and unshareable kind of hell from which it is no mean task to help him to escape.

The authority's provision for its deaf children is outlined in Table III of the section on Audiology. The diagnostic service has improved markedly in recent years and full credit must be given to Dr. Hughes and those working in the field for their efforts in this direction.

It seems strangely permissible for our society to make jokes about the deaf which would be considered in extremely bad taste were they to be directed at any other handicap. One can only hope for a greater public sympathy as the years roll by.

I must record a note of alarm at the comments in the section on the Care of the Elderly. There is an increasing number of old people in the city. Many of them are in need of urgent help and the problems of providing them with suitable residential or community support loom ever larger. Yet it is noted that there are serious difficulties in establishing proper lines of communication between members of the Health Department staff and field workers of the new Social Services Department. It is easy to put these difficulties down to problems of reorganisation and to express the pious hope that they will be ironed out in time. Time, however, is not on the side of the aged and infirm and problems must be solved now or, for many, it will be too late.

In his report on the Dental Services Mr. Newcombe states that there should be a restructuring of the dental staff to create senior posts which would encourage promotion within the Department and thus avoid wastage of personnel who leave to take posts elsewhere. I agree with the general tenure of the argument but deplore the current trend to create pseudo-managerial, semi-administrative posts to compensate for the lack of a genuine national clinical career structure. For too long it has been a fault of the medical and para-medical staffing of the community based services that the only way to progress is to exchange a clinical role for an administrative one. Clinical expertise should be recognised in its own right and there should be appropriate advanced scales to credit this. Quite recently this concept has been recognised amongst public health doctors for whom posts of special clinical responsibility can be created and the concept should be more widely adopted.

The Medical Officer of Health heads a department of many widely differing professional disciplines. Within the covers of this book, therefore, there also appear the reports of the Chief Public Health Inspector and the City Analyst. The whole is rather like a three act play with each act being divided into a number of smaller scenes. This preface corresponds with the overture to Act One. Mr. Bate, the Chief Public Health Inspector and Mr. Phillips, the City Analyst, have composed their own overtures to their respective Acts. On this occasion I shall let them speak for themselves and bring this introduction to a close without highlighting any particular facet of their work. I shall merely thank them for their full co-operation during the year under review.

These sentiments are extended throughout the department to all members of staff, senior and junior, whose loyalty and efforts throughout a difficult year have been much appreciated.

Perhaps I should add a final word of thanks to the voluntary agencies without whose efforts in many directions we would have seen a virtual collapse of many of the services which the Department endeavours to provide for the people of Cardiff.

D. J. ANDERSON

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February, 1973.

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J. N. P. HUGHES, M.B., B.CH., D.P.H.

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T. T. WESTHEAD, M.B., CH.B., D.P.M., D.P.H.

MEDICAL OFFICER (With Special Responsibilities)

GILLIAN BRYANT, M.B., B.CH.(WALES), D.C.H., D.OBS.R.C.O.G.
(Joint appointment with Welsh National School of Medicine)

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Eight and a half Nursing Auxiliaries

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One Senior Public Health Inspector (Housing)

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One Rehousing Assistant

Four Senior Specialist Public Health Inspectors

Five Specialist Public Health Inspectors

Nine Pupil Public Health Inspectors

One Rodent Control Officer

Seven Technical Assistants

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Deputy City Analyst – R. H. MCKINLAY, F.R.I.C.

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Typist

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Administrative and Clerical Assistants – General, Finance	24
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and One and a half Speech Therapists

Senior Physiotherapist – Mrs. I. M. CASHMAN, M.C.S.P.

and four Physiotherapists (Sessional)

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GENERAL HEALTH SERVICE

I—SUMMARY OF GENERAL AND VITAL STATISTICS

Area (acres):

Including inland water and foreshore	..	..	..	..	..	22,736
Including inland water (excluding foreshore)	..	..	..	..	..	19,941
Excluding inland water and foreshore	..	..	..	..	..	19,366

Population:

Census 1961	..	..	..	..	..	256,270
Registrar-General's estimate, mid-1971	..	..	..	..	..	276,790
Number of persons per acre	..	..	..	..	..	14.29
Estimated number of inhabited houses	..	..	..	..	..	88,566
Estimated number of inhabited houses per acre	..	..	..	..	..	4.57
Estimated average number of persons per occupied house	..	..	..	..	..	3.13
Rateable value, 1.4.71	..	..	..	..	..	£14,209,335
Estimated product of a one new penny rate 1971-72	..	..	..	..	..	£134,405

Live Births	..	Male 2,196 Female 2,075	4,271	Birth Rate per 1,000	{ Crude .. 15.4 Adjusted by A.C.F. 15.2
				Ratio of Local Adjusted Birth Rate to National Rate	.. .. 0.95
Illegitimate Live Births	..	..	476	% of Total Live Births	.. .. 11
Stillbirths	..	..	63	Rate per 1,000 Total Births	.. 14.5
Deaths	..	Male 1,675 Female 1,611	3,286	Death Rate per 1,000	{ Crude 11.9 Adjusted by A.C.F. 13.1
				Ratio of Local Adjusted Death Rate to National Rate	.. .. 1.10
Deaths Under one year	Male 47 Female 40		87	Death Rate per 1,000 Live Births	.. 20.4
Deaths - Legitimate Infants	..	..	74	Death Rate per 1,000 Legitimate Births	.. .. 19.5
Deaths - Illegitimate Infants	..	..	13	Death Rate per 1,000 Illegitimate Births	.. .. 27.3
Neo-natal Deaths	..	..	57	Death Rate per 1,000 Live Births	.. 13.3
Early Neo-natal Deaths	..	..	52	Death Rate per 1,000 Live Births	.. 12.2
Peri-natal Deaths	..	..	115	Death Rate per 1,000 Total Births	26.5
Maternal Deaths	..	..	0	Death Rate per 1,000 Total Births	0

II—AREA AND POPULATION

The area of Cardiff (land and inland water but excluding foreshore) is 19,941 acres.

According to the Census of 1961, the population of Cardiff was 256,270 (males 123,384, females 132,886).

The population at mid-1971, as estimated by the Registrar-General, was 276,790 and it is on this figure that the vital statistics for 1971 are computed.

III—BIRTHS

The numbers of births and still-births occurring and allocated to Cardiff during 1971 sub-divided according to sex and legitimacy are shown on Table I.

Live-births and crude rates per 1,000 population are compared with the England and Wales figures for the past ten years in Table II.

Still-birth statistics and illegitimate birth figures are shown in Tables III and IV respectively.

Table I Live Births

	Legitimate	Illegitimate	Total
Males	1,963	233	2,196
Females	1,832	243	2,075
TOTAL	3,795	476	4,271

Still Births

	Legitimate	Illegitimate	Total
Males	24	8	32
Females	29	2	31
TOTAL	53	10	63

Table II Live Births

Year	Population	Legitimate Births	Illegitimate Births	Total	Crude Birth Rate	England and Wales Birth Rate
1961	256,900	4,652	316	4,968	19.34	17.4
1962	260,160	4,613	366	4,979	19.14	18.0
1963	260,640	4,863	395	5,258	20.17	18.2
1964	260,340	4,635	441	5,076	19.50	18.4
1965	260,170	4,439	436	4,875	18.74	18.0
1966	259,700	4,123	498	4,621	17.79	17.7
1967	* 281,750	4,211	508	4,719	16.7	17.2
1968	287,460	4,212	488	4,700	16.4	16.9
1969	285,860	3,922	450	4,372	15.3	16.3
1970	284,010	3,831	462	4,293	15.1	16.0
1971	276,790	3,795	476	4,271	15.4	16.0

*'Estimated Mid-year population' for purpose of calculating vital statistics

Table III Still Births

Year	Legitimate	Illegitimate	Total	Rate per 1,000 Total Births	
				Cardiff	England and Wales
1961	91	9	100	19.73	18.7
1962	89	8	97	19.11	18.1
1963	74	11	85	15.91	17.3
1964	87	3	90	17.42	16.3
1965	67	10	77	15.55	15.7
1966	77	8	85	18.06	15.4
1967	54	11	65	13.6	14.8
1968	53	12	65	13.6	14.3
1969	60	12	72	16.2	13.0
1970	55	5	60	13.8	13.0
1971	53	10	63	14.5	12.0

Table IV Illegitimate Births

Year	Live	Still	Total	Rate per 1,000 Total Births	
				Cardiff	
1961	316	9	325	64.1	
1962	336	8	374	73.7	
1963	395	11	406	75.99	
1964	441	3	444	85.95	
1965	436	10	446	90.01	
1966	498	8	506	107.5	
1967	508	11	519	108.5	
1968	488	12	500	104.9	
1969	450	12	462	104.0	
1970	462	5	467	107.3	
1971	476	10	486	112.1	

IV—DEATHS

Deaths from all Causes – The total number of deaths from all causes and at all ages registered during the year and allocated to Cardiff was 3,286 (1,675 males and 1,611 females). The total number of deaths registered in Cardiff was 3,423 but 576 of these were deaths of non-residents which occurred mainly in hospitals and nursing homes, and 439 deaths of residents of Cardiff occurred and were registered in other areas. Allowance has been made for these outward and inward transferable deaths in arriving at the net number.

The following is a comparison of the death-rate for 1971 and the preceding ten years with the death rates for England and Wales for the same period.

Year	Deaths	Crude Death Rate	England and Wales Death Rate
1961	2,946	11.47	11.9
1962	2,991	11.50	11.9
1963	3,040	11.66	12.2
1964	2,800	10.76	11.3
1965	2,811	10.80	11.5
1966	3,016	11.61	11.7
1967	3,059	10.9	11.2
1968	3,367	11.7	11.9
1969	3,326	11.6	11.9
1970	3,286	11.6	12.8
1971	3,286	11.9	11.6

Cancer.—The number of deaths from malignant neoplasms including 13 deaths from leukaemia and aleukaemia was 701 (395 males and 306 females). The deaths are classified according to age and localisation of the disease in the Table on page 9. The total cancer deaths excluding leukaemia and aleukaemia for the previous ten years are shown below.

Year	No. of Deaths			Death Rate per 1,000 Population
	Males	Females	Total	
1961	266	255	521	2.02
1962	296	253	549	2.11
1963	328	252	580	2.23
1964	282	228	510	1.96
1965	330	205	535	2.06
1966	314	277	591	2.28
1967	344	321	665	2.36
1968	333	298	631	2.11
1969	347	269	616	2.15
1970	308	298	606	2.17
1971	391	297	688	2.49

Deaths from Motor Vehicle Accidents.—The number of deaths due to motor vehicle accidents in the year was 39 (25 males and 14 females) as compared with 26 deaths during 1970. The average for the preceding ten years (1961–70) was 36.

Other Accidents.—Other accidents account for 66 deaths (31 males and 35 females) and of that number 29 were under 65 years of age; 19 of them being under 45 years.

Maternal Mortality.—There were no maternal deaths during the year.

Infant Mortality.—The number of deaths under 1 year was 87 and of those 74 were legitimate and 13 illegitimate. There were 52 deaths of infants under 1 week and when the 63 still-births are added, the peri-natal mortality rate is 26.5. The neo-natal deaths numbering 57 being 65.5 of the total deaths.

The table below compares the infant mortality rate with the preceding 10 years and with the rates for England and Wales.

Year	Infant Deaths			Neo-natal Deaths			Still Births		
	No.	Rate per 1,000 Live Births		No.	Rate per 1,000 Live Births		No.	Rate per 1,000 Total Births	
		Cardiff	E. & W.		Cardiff	E. & W.		Cardiff	E. & W.
1961	120	24.15	21.4	77	15.49	15.5	100	19.73	18.7
1962	131	26.31	20.7	99	19.88	15.1	97	19.11	18.1
1963	130	24.72	20.9	92	17.49	14.2	85	15.91	17.3
1964	110	21.67	20.0	82	16.15	13.8	90	17.42	16.3
1965	111	22.77	19.0	63	12.92	13.0	77	15.55	15.7
1966	102	22.07	19.0	71	15.36	12.9	85	18.06	15.4
1967	100	21.2	18.3	62	13.1	12.5	65	13.6	14.8
1968	100	21.3	18.0	74	15.7	12.3	65	13.6	14.0
1969	83	19.0	18.0	55	12.6	12.0	72	16.2	13.0
1970	90	21.0	18.0	57	13.0	12.0	60	13.8	13.0
1971	87	20.4	18.0	57	13.0	12.0	63	14.5	12.0

The following table, compiled from figures supplied by the Registrar-General, shows the causes of death up to one year of age during 1971.

CAUSES OF DEATH		Under 1 day	1-6 days	1 week	2 weeks	3 weeks	Total under 4 weeks	1 month	2 months	3-5 months	6-8 months	9-11 months	Total All Ages
Infective and Parasitic	0089 Viral enteritis and gastro-enteritis NOS	..	..	..	..	..	..	..	..	..	1	..	1
	0092 Gastro-enteritis and colitis	..	..	..	..	..	..	..	..	1	..	..	1
	0799 Viraemia NOS	..	..	..	..	..	..	..	..	..	..	..	1
	Neoplasms	..	..	..	..	..	..	..	..	..	..	..	..
Endocrine, Nutritional and Metabolic	1890 Kidney, except pelvis	..	..	..	1	..	1	..	..	..	..	..	1
	2559 Other and unspecified	..	..	..	..	..	..	..	1	..	..	..	1
	279 Other and unspecified metabolic	..	..	..	..	..	..	..	..	..	..	1	1
	Diseases of the Blood	..	..	..	..	..	..	1	..	..	..	..	1
Nervous System and Sense Organs	2869 Other	..	..	..	..	..	..	..	..	..	..	..	1
	323 Encephalitis, myelitis and encephalomyelitis	..	..	..	..	..	..	..	..	..	..	1	1
	Circulatory System	..	..	..	..	..	..	1	..	..	..	..	1
	453 Other venous embolism and thrombosis	..	..	..	..	..	..	..	..	..	..	..	1
Respiratory System	466 Acute bronchitis and bronchiolitis	..	..	..	..	..	..	..	..	4	..	..	4
	481 Pneumococcal pneumonia	..	..	..	..	..	..	..	1	..	..	..	1
	485 Bronchopneumonia, unspecified	..	..	..	..	..	..	1	1	1	..	..	5
	5192 Other diseases of lung	..	..	..	..	1	1	..	..	..	..	..	1
Digestive System	5513 Diaphragmatic	1	..	..	..	..	1	..	..	..	..	..	1
	Congenital Anomalies	..	..	..	..	..	..	..	..	..	..	..	..
	7410 Spina Bifida with Hydrocephalus	..	..	..	1	..	1	1	..	..	1	..	3
	7462 Trisomy of Fallot	..	..	..	..	..	..	..	..	1	..	..	1
Perinatal Causes	7464 Atrial septal defect	..	1	..	..	..	1	..	..	..	..	..	2
	7466 Anomalies of heart valves	..	1	..	..	..	1	..	..	..	..	..	2
	7470 Patent ductus arteriosus	..	1	..	..	..	1	..	..	..	..	..	1
	7474 Anomalies of great veins	..	1	..	..	..	1	..	..	..	1	..	1
Symptoms, Ill-Defined Conditions	7486 Other anomalies of lung	1	..	..	..	..	1	..	..	..	..	..	1
	7512 Atresia and stenosis of rectum and anal canal	1	..	..	..	..	1	..	..	..	..	..	1
	7599 Multiple congenital anomalies, unspecified	1	..	..	..	..	1	..	..	..	..	..	1
	7664 With asphyxia, anoxia or hypoxia	1	..	..	..	..	1	..	..	..	..	..	1
Symptoms, Ill-Defined Conditions	7694 Multiple pregnancy	..	..	..	..	..	..	..	..	..	..	..	..
	7720 Injury to brain	1	12	1	..	..	14	..	..	..	..	..	14
	7750 With Rh. incompatibility	..	1	..	..	..	1	..	..	..	..	..	1
	7762 Respiratory distress syndrome	..	7	..	..	..	7	..	..	..	..	..	7
Symptoms, Ill-Defined Conditions	7764 Intra-uterine anoxia	1	..	..	..	..	1	..	..	..	..	..	1
	7769 Asphyxia of newborn unspecified	3	2	..	..	..	5	..	..	..	..	..	5
	777 Immaturity unqualified	6	2	..	..	..	8	1	..	..	..	..	9
	7782 Haemorrhagic disease of newborn	2	..	..	..	..	2	..	..	..	..	..	2
Symptoms, Ill-Defined Conditions	7789 Other	1	..	..	..	..	1	..	..	..	..	..	1
	795 Sudden death (cause unknown)	..	..	..	..	..	..	1	..	3	3	..	7
	External Cause of Injury	..	..	..	..	..	..	..	..	..	..	..	..
	904 Hunger, thirst, exposure and neglect	..	1	..	..	..	1	..	..	..	..	..	1
Symptoms, Ill-Defined Conditions	911 Inhalation and ingestion of food	..	1	..	..	..	1	..	..	..	..	..	1
	9130 In bed or cradle	..	..	..	..	..	..	..	1	..	..	..	1
	TOTAL	19	33	2	2	1	57	6	4	12	6	2	87
	PERCENTAGE	21.8	37.8	2.3	2.3	1.1	65.5	7.0	4.6	13.8	7.0	2.3	100

The following table, compiled from figures supplied by the Registrar-General, shows the causes of death at various ages during 1971

CAUSES OF DEATH	ALL AGES			AGE IN YEARS										
	M.	F.	Total	Under 4 wks.	4 Wks. - Under 1 year	1-4 yrs.	5-14 yrs.	15-24 yrs.	25-34 yrs.	35-44 yrs.	45-54 yrs.	55-64 yrs.	65-74 yrs.	75 yrs. and over
4. Enteritis and other diarrhoeal diseases	2	—	2	—	2	—	—	—	—	—	2	3	1	—
5. Tuberculosis of Respiratory System	4	4	8	—	—	—	—	—	—	—	—	—	—	2
6. Other Tuberculosis	1	2	3	—	—	—	—	—	—	—	—	—	—	3
7. Syphilis and its sequelae	1	2	3	—	—	—	—	—	—	—	—	—	—	1
8. Other infective and parasitic diseases	1	4	5	—	1	2	—	—	—	—	—	—	—	—
9. (1) Malignant Neoplasm, Buccal Cavity, etc.	2	2	4	—	—	—	—	—	—	—	—	—	—	—
9. (2) Malignant Neoplasm, Oesophagus	12	12	24	—	—	—	—	—	—	—	—	—	—	12
9. (3) Malignant Neoplasm, Stomach	47	35	82	—	—	—	—	—	—	—	—	—	—	26
9. (4) Malignant Neoplasm, Intestine	53	52	105	—	—	—	—	—	—	—	—	—	—	33
9. (5) Malignant Neoplasm, Larynx	5	—	5	—	—	—	—	—	—	—	—	—	—	—
9. (6) Malignant Neoplasm, Lung, Bronchus	147	29	176	—	—	—	—	—	—	—	—	—	—	35
9. (7) Malignant Neoplasm, Breast	2	66	68	—	—	—	—	1	—	—	—	20	17	2
9. (8) Malignant Neoplasm, Uterus	—	19	19	—	—	—	—	—	—	—	—	5	6	7
9. (9) Malignant Neoplasm, Prostate	22	—	22	—	—	—	—	2	—	—	—	2	—	13
9. (10) Leukaemia	4	9	13	—	—	—	—	—	—	—	—	—	—	3
9. (11) Other Malignant Neoplasms	101	82	183	1	—	1	2	2	6	6	19	47	53	46
10. Benign and Unspecified Neoplasms	3	5	8	—	—	—	—	—	—	—	—	—	—	2
11. Diabetes Mellitus	19	23	42	—	—	—	2	—	—	—	—	—	—	17
16. (1) Other endocrine, etc. diseases	3	9	12	—	2	—	—	—	—	—	—	—	—	4
23. Anaemias	2	4	6	—	—	—	—	—	—	—	—	—	—	4
46. (2) Other diseases of blood, etc.	1	2	3	—	—	—	—	—	—	—	—	—	—	4
46. (3) Mental Disorders	—	15	15	—	—	—	—	—	—	—	—	—	—	11
46. (4) Meningitis	—	3	3	—	—	—	—	—	—	—	—	—	—	1
46. (5) Multiple Sclerosis	—	1	1	—	—	—	—	—	—	—	—	—	—	—
46. (6) Other diseases of nervous system	13	21	34	—	—	—	1	2	—	—	—	—	—	13
46. (7) Chronic rheumatic heart disease	16	38	54	—	—	—	—	—	—	—	—	—	—	13
46. (8) Hypertensive disease	39	47	86	—	—	—	—	—	—	—	—	—	—	15
46. (9) Ischaemic heart disease	499	366	865	—	—	—	—	—	—	—	—	—	—	22
46. (10) Other forms of heart disease	56	74	130	—	—	—	—	—	—	—	—	—	—	43
46. (11) Cerebrovascular disease	146	239	385	—	—	—	—	—	—	—	—	—	—	365
46. (12) Other diseases of circulatory system	68	72	140	—	—	—	—	—	—	—	—	—	—	208
31. Influenza	2	2	4	—	—	—	—	—	—	—	—	—	—	90
32. Pneumonia	92	128	220	—	—	—	—	—	—	—	—	—	—	3
33. (1) Bronchitis and Emphysema	115	33	148	2	4	2	—	—	—	—	—	—	—	154
33. (2) Asthma	2	3	5	—	—	—	—	—	—	—	—	—	—	68
46. (13) Other diseases of respiratory system	30	19	49	1	4	—	—	—	—	—	—	—	—	3
34. Peptic Ulcer	9	4	13	—	—	—	—	—	—	—	—	—	—	21
35. Appendicitis	1	1	2	—	—	—	—	—	—	—	—	—	—	6
36. Intestinal obstruction and hernia	2	8	10	—	—	—	—	—	—	—	—	—	—	1
37. Cirrhosis of Liver	4	7	11	—	—	—	—	—	—	—	—	—	—	5
46. (14) Other diseases of digestive system	10	14	24	—	—	—	—	—	—	—	—	—	—	1
46. (15) Nephritis and Nephrosis	5	13	18	—	—	—	—	—	—	—	—	—	—	10
46. (16) Hyperplasia of prostate	2	—	2	—	—	—	—	—	—	—	—	—	—	4
46. (17) Other diseases, genito-urinary system	6	20	26	—	—	—	—	—	—	—	—	—	—	1
46. (18) Diseases of Skin, Subcutaneous Tissue	1	2	3	—	—	—	—	—	—	—	—	—	—	14
46. (19) Other diseases of musculo-skeletal system	4	5	9	—	—	—	—	—	—	—	—	—	—	3
42. Congenital anomalies	10	15	25	8	5	3	3	3	—	—	—	—	—	3
43. Birth injury, difficult labour, etc.	16	12	28	28	—	—	—	—	—	—	—	—	—	—
44. Other causes of peri-natal mortality	10	5	15	14	—	—	—	—	—	—	—	—	—	—
45. Symptoms of ill defined conditions	8	15	23	—	7	—	—	—	—	—	—	—	—	—
47. Motor vehicle accidents	25	14	39	—	—	—	4	10	—	—	—	—	—	12
48. All other accidents	31	35	66	—	—	—	4	4	—	—	—	—	—	6
49. Suicide and self-inflicted injuries	17	14	31	2	1	—	—	—	—	—	—	—	—	31
50. All other external causes	3	5	8	—	—	—	—	—	—	—	—	—	—	4
ALL CAUSES	1,675	1,611	3,286	57	30	8	17	28	23	73	215	516	913	1,406
Percentage of Total Deaths	..	..	..	1.7	0.9	0.3	0.5	0.8	0.7	2.2	6.6	15.7	27.8	42.8

V—INFECTIOUS DISEASES

J. N. P. HUGHES, M.B., B.Ch., D.P.H.

The table below shows the incidence of notifiable infectious diseases in the city during 1971, together with figures for the previous decade.

It should be noted that for 1971 the most prevalent infection shown was gonorrhoea, which has increased over the years considerably and now supersedes measles at the head of the league table. Infective jaundice, notifiable only since 1968, is third in the list. The remaining diseases notified are of considerably less numerical importance.

The incidence of notifiable diseases compared with that of the previous ten years is shown in the following table:

Disease	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962
Scarlet Fever	26	27	19	32	71	106	73	63	60	69
Whooping Cough	71	33	6	46	84	109	32	200	218	21
Diphtheria	—	—	—	—	—	—	—	—	—	—
Measles	533	1,019	1,541	171	1,948	1,781	1,322	1,682	3,594	1,028
Acute Meningitis	31	—	13	9	1	1	—	17	4	2
Paralytic acute Poliomyelitis	—	—	—	—	—	—	—	—	—	8
Non-paralytic Poliomyelitis	—	—	—	—	—	—	—	—	—	2
Acute Encephalitis – infective	—	—	—	—	—	—	1	—	—	—
Acute Encephalitis – post infectious	2	2	—	4	5	—	—	—	1	—
Dysentery	62	30	56	29	64	50	355	33	97	207
Ophthalmia Neonatorum	1	1	—	1	3	—	5	2	2	3
Paratyphoid Fever	2	1	—	—	—	—	2	—	6	—
Typhoid Fever	2	1	—	—	2	—	—	—	2	2
Food Poisoning	76	56	36	50	61	26	32	46	52	46
Malaria	4	1	—	1	—	—	2	—	—	—
Anthrax	—	—	—	1	2	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	1
Leprosy	1	—	—	—	—	—	—	—	—	—
Infective Jaundice	273	256	81	45	(Notifiable from 15th June, 1968)					
Leptospirosis	1	—	—	—	(Notifiable from 1st October, 1968)					
Gonorrhoea	541	396	418	367	267	185	221	382	405	427
Syphilis	39	48	61	33	41	33	44	30	50	41
Tuberculosis – Respiratory	74	66	68	83	77	87	73	100	95	136
Other	14	19	13	15	16	12	19	14	13	13

Measles

The number of notified cases was 533 during a year which should have been one of maximal measles incidence. As previously noted in Cardiff the early introduction of measles immunisation has modified the biennial maximal incidence. In its place we have experienced an overall decreased occurrence of measles, but on a more even annual pattern. The number of infants immunised during the year indicated that some 43.6% of the 1969 cohort were given measles vaccine. This is not considered a high enough level if we are to attempt to eradicate the disease. However, many of the medical practitioners in the area are approaching measles immunisation with caution. Until they are convinced of its safety and the desirability of eradicating measles, it is unlikely that we shall achieve a high level of population cover. We are considering a campaign of health education in an attempt to convince the public of the value of measles immunisation.

Whooping Cough

Seventy-one cases were notified. Of these, 47 had never been immunised: of the remainder 2 had received only the first injection, 6 had received the primary course of three injections but no 'booster' and 16 had received the full course.

Typhoid Fever

Two cases of typhoid fever occurred during the year.

The first patient (male: 21 years) was admitted to the Lansdowne Hospital on 10th June. He had returned to Cardiff a month previously from a three month holiday with relations in West Pakistan. Four days after his return he had suffered from nausea, occasional vomiting and loose stools. In the week prior to admission he complained of headache, constipation, night sweats and muscle cramps. *Salmonella typhi* was isolated from his blood culture and also from his faeces. He responded well to chemotherapy, and was discharged after a series of negative faecal swabs on 6th July.

The second case (male: 9 years) was admitted to Lansdowne Hospital on 6th July. He had arrived from India on 5th June, and commenced suffering from diarrhoea and vomiting on 4th July. *Salmonella typhi* was isolated from his blood culture and faeces. After treatment he soon recovered, and was discharged after a series of negative faecal swabs.

In both cases the *Salmonella typhi* isolated belonged to a degraded Vi-strain. All contacts were investigated, but no further cases were found.

Paratyphoid Fever

There were two cases of paratyphoid fever in 1971.

The first patient became ill with headache and nausea on 4th July, the night he returned home from a two week holiday in the South of England. He was treated at home for diarrhoea, sweating and rigors. His condition continued to deteriorate, and it was not until on 26th July when laboratory examination of a faecal specimen revealed the presence of *S. Paratyphi B.*, that the cause of his illness was established, and he was admitted to Lansdowne Hospital. In spite of treatment he still continued to excrete *Salmonella* in his stools but was clinically well. He was discharged home and kept under surveillance by this department. A series of negative faecal specimens was eventually obtained, and he was finally cleared on 15th September.

All family contacts were checked and the medical officers of health in the towns where he had stayed were informed, but no further cases were discovered.

The second case of paratyphoid fever was an accidental finding in November during routine sampling of contacts in an outbreak of dysentery in a Cardiff hospital. The 'patient' – a member of the nursing staff – was quite symptomless, had never suffered any major illness, and had no recollection of ever having had an illness which involved a severe gastroenteritis. Her family and other contacts were checked with negative results. After exclusion from duty and treatment at home, she eventually was cleared after a sequence of negative samples.

IMPORTED DISEASES

Typhoid and Paratyphoid Fever

A number of reports were received from the Welsh Office and Medical Officers of Health of other local authority areas regarding enteric infections occurring in persons who had recently returned from travelling abroad.

Contacts of these cases living in the Cardiff area were all investigated and found to be free from infection.

Cholera

One of the most popular countries for 'package tour' holidays is Spain, due partly to the warm climate and the relative economy of the costs. The Spanish Government notified the World Health Organisation on 7th September of the existence of 14 cases of cholera in the provinces of Valencia and Barcelona. How long these cases had existed before official notification is far from clear: reports in the world Press had for some time referred to outbreaks of what was described as 'summer diarrhoea' in the provinces, with suggestions that attempts were being made to suppress information to protect the tourist industry.

One Swedish holiday-maker returning on holiday from Benidorm on 20th August had developed cholera, and a British holiday-maker had died in Sitges in Barcelona on 29th August after a diarrhoeal illness which the Spanish authorities did not attribute to cholera.

It was necessary to make arrangements to keep under surveillance all travellers returning from Spain if they were not in possession of valid International Certificates against cholera. To this end arrangements were made in co-operation with the Port Medical Officers for Rhose and Bristol airports for us to be supplied with lists of passengers arriving who resided in the Cardiff area. In addition arrivals were also notified by medical officers at other airports such as Heathrow, Gatwick and Luton. Initially all travellers were visited at home by public health inspectors, and where suspicious symptoms existed either during their holiday abroad or after returning home, samples were taken for bacteriological examination. It was subsequently made possible to reduce the considerable number of visits which this entailed by introducing the use of a simple questionnaire to be completed by passengers during their return flight. Examination of the answers enabled persons in special categories due to occupation, sickness during holiday, etc., etc., to be selected for surveillance. A total of 1,036 passengers were dealt with entailing 553 visits. Because of suspicious symptoms, faecal specimens were obtained from 42 persons: all proved negative for *V. cholerae*.

Food Poisoning

Seventy-six cases were notified; 40 of these were involved with 12 'family' outbreaks, the remaining 36 being sporadic cases. All were thoroughly investigated and in only 6 cases the cause was unknown, the remaining 70 cases were all caused by *Salmonella* organisms.

Twenty-one cases were caused by *Salmonella enteritidis*; of these 11 occurred in an outbreak in a Cardiff hospital. One patient (male: 68 years) with a *Salmonella agona* infection, died from bronchopneumonia, renal failure and a cerebrovascular accident.

An outbreak of *Salmonella panama* amongst pigs at a farm within the city boundary, where a herd of dairy cows were also kept, led to an investigation of farm personnel. Four persons were found to be suffering from gastroenteritis, due to the same organisms. Arrangements were made to ensure that no raw milk was consumed on the farm, and that all milk sold was subjected to pasteurisation.

In another food poisoning incident due to *Salmonella typhimurium*, it was necessary to exclude one person from continuing her occupation as a food handler. Formal notice was served under the provisions of the Public Health (Infectious Diseases) Regulations 1968, and a subsequent claim for financial losses was met in accordance with Section 278 of the Public Health Act 1936.

Details of incidents and cases are given in the following table in the form prescribed by the Department of Health and Social Security.

Food Poisoning — Incidents and Cases

Causative Agent	General Outbreaks		Family Outbreaks		Sporadic Cases Notified or ascertained	Total No. of outbreaks and sporadic cases (Cols. 1, 3 & 5)	Total No. of cases (Cols. 2, 4 & 5)
	No. of separate outbreaks	No. of cases notified or ascertained	No. of separate outbreaks	No. of cases notified or ascertained			
1. <i>S. typhimurium</i> ..	—	—	5	12	6	11	18
2. Other <i>Salmonellae</i> (a)	—	—	6	26	26	32	52
3. <i>Cl. welchii</i> ..	—	—	—	—	—	—	—
4. <i>Staph. aureus</i> ..	—	—	—	—	—	—	—
5. Other causes (b) ..	—	—	—	—	—	—	—
6. Cause unknown ..	—	—	1	2	4	5	6
7. Total	—	—	12	40	36	48	76

Food Poisoning due to *Salmonellae* other than *S. typhimurium*

Causative Agent	General Outbreaks		Family Outbreaks		Sporadic Cases Notified or ascertained	Total No. of outbreaks and sporadic Cases (Cols. 1, 3 & 5)	Total No. of cases (Cols. 2, 4 & 5)
	No. of separate outbreaks	No. of cases notified or ascertained	No. of separate outbreaks	No. of cases notified or ascertained			
Type of <i>Salmonella</i>							
<i>S. Agona</i>	—	—	2	7	2	4	9
<i>S. Anatum</i>	—	—	—	—	2	2	2
<i>S. Bredeney</i>	—	—	—	—	1	1	1
<i>S. Derby</i>	—	—	—	—	1	1	1
<i>S. Dublin</i>	—	—	—	—	1	1	1
<i>S. Enteritidis</i>	—	—	2	13	8	10	21
<i>S. Heidelberg</i>	—	—	1	4	1	2	5
<i>S. Infantis</i>	—	—	1	2	4	5	6
<i>S. Livingstone</i>	—	—	—	—	1	1	1
<i>S. Stanleyville</i>	—	—	—	—	—	—	—
<i>S. Okatie</i>	—	—	—	—	1	1	1
<i>S. Oranienberg</i>	—	—	—	—	1	1	1
<i>S. Meleagridis</i>	—	—	—	—	1	1	1
<i>S. Panama</i>	—	—	—	—	2	2	2

Smallpox

No cases occurred in Cardiff during the year.

As a result of notifications received from Port Medical Officers in accordance with the Public Health (Aircraft) Regulations 1966 and the Public Health (Ships) Regulations 1966, seven persons were placed under surveillance.

Leptospirosis

One case was notified. The patient, a fourteen year old boy, resides in Llandaff North. He was admitted to Lansdowne Hospital on 21st May as a suspected case of meningitis, having been ill since 16th May. He was subsequently diagnosed as suffering from leptospirosis.

The patient's home and school are both within a few hundred yards of the Taff River. Although it was not possible, after careful investigation, to establish any definite link between the river and rodent infestations which were under treatment along its bank, and in a building contractor's hut in the school grounds, nevertheless circumstantial evidence pointed to these factors as the likely source of the infection.

Venereal Diseases

The table below gives the statistics concerning venereal diseases treated in the city during 1971.

Treatment for Venereal Diseases	Total Cases					
	1966	1968	1970	1971		
				Male	Female	Total
New Cases						
Syphilis only	33	33	48	30	9	39
Gonorrhoea only	185	367	396	371	170	541
Other conditions						
(a) Requiring treatment	710	949	1,228	768	483	1,251
(b) Not Requiring Treatment ..	238	242	564	380	288	668
(c) Not yet diagnosed	5	2	6	—	—	—
TOTALS	1,171	1,593	2,242	1,549	950	2,499
TOTAL ATTENDANCES	4,937	5,178	7,339	5,054	3,004	8,058
IN-PATIENT DAYS IN HOSPITAL ..	494	387	499	211	275	486

Age Groups	1971			1970		
	Male	Female	Total	Male	Female	Total
(a) SYPHILIS						
Under 16 years	—	—	—	—	—	—
16-18 years	—	—	—	—	1	1
19-24 years	8	3	11	9	6	15
25 years and over	22	6	28	24	8	32
	30	9	39	33	15	48
(b) GONORRHOEA						
Under 16 years	—	8	8	1	5	6
16-18 years	25	22	47	43	31	74
19-24 years	150	76	226	91	57	148
25 years and over	196	64	260	132	36	168
	371	170	541	267	129	396
(c) OTHER CONDITIONS						
Under 16 years	—	38	38	—	28	28
16-18 years	103	90	193	97	117	214
19-24 years	485	391	876	423	315	738
25 years and over	560	252	812	541	277	818
	1,148	771	1,919	1,061	737	1,798

These statistics continue to show an annual increase which has been demonstrated in the city throughout the past decade. During 1971, gonorrhoea was the most prevalent notifiable infectious disease. This was partly due to the effectiveness of control measures undertaken regarding the other diseases especially the effect of measles immunisation in reducing that particular illness. However, the persisting annual increase in venereal diseases notified illustrates the ineffectiveness of health education efforts directed at their control.

It might well be that the tendency to assume that sexual promiscuity is predominantly affecting our society amongst teenagers is mistaken. The incidence of venereal disease undoubtedly provides an indication of the extent of sexual promiscuity. It should, therefore, be noted that incidence is greatest among the older age groups shown in the tables. Therefore, perhaps we should direct preventive educational measures to those in the population

in the third decade of life and desist from the current tendency of castigating the teenager.

Staff concerned with contact tracing work with venereal disease report that their task is gradually easing. Whilst the numbers increase in size the former secretiveness and embarrassment factors which inhibited this aspect of work are diminishing.

The figures shown show an increase of 36% in cases of gonorrhoea over the past year whilst 'other venereal conditions' increased by some 15%. Fortunately, the cases of syphilis notified decreased by 19% during the year. The age distributions and sex ratios of cases presenting for treatment continued as in previous years. Nearly twice as many males as females were treated.

Tuberculosis

In the following tables the mortality and morbidity due to tuberculosis are given. No dramatic changes are shown in comparison with the situation in recent years and the mortality from this cause, already low, shows a further slight fall. However, it is felt that a note of caution should be expressed concerning the notifications of cases of tuberculosis. At best notification is incomplete and we frequently come across cases of successfully treated tubercle in which the clinician has failed to notify. For very many years there has been an annual decline in notifications indicating a declining level of infection in the community. This year there is a small increase over the previous year's figures. Cases of non-pulmonary tubercle have decreased to a level which existed for several years prior to a small increase in 1970.

One full-time specialist health visitor is engaged in work assisting the Chest Physicians in the control of tuberculosis by contact tracing and home visiting of known cases under treatment.

Table I

Number of notified cases of pulmonary tuberculosis dying during 1971 where pulmonary tuberculosis was the direct cause of death or was mentioned as a contributory cause of death.

Age Groups	Number of deaths where Pulmonary Tuberculosis was given as the direct cause of death		Number of deaths where Pulmonary Tuberculosis was mentioned as a contributory cause of death	
	Males	Females	Males	Females
0-14 years	—	—	—	—
15-24 years	—	—	—	—
25-34 years	—	—	—	—
35-44 years	—	—	—	—
45-54 years	1	2	—	—
55-64 years	2	1	3	—
65 years and over	1	2	4	2
TOTAL	4	5	7	2

Table II

Giving the number of new cases of Tuberculosis during 1971 by age and sex

	Pulmonary		Total	Non-Pulmonary		Total
	Males	Females		Males	Females	
Under 1 year	—	—	—	—	—	—
1 year	—	1	1	—	—	—
2-4 years	—	—	—	—	1	1
5-9 years	2	3	5	—	1	1
10-14 years	—	1	1	—	—	—
15-19 years	3	3	6	2	1	3
20-24 years	1	4	5	—	—	—
25-34 years	4	1	5	1	2	3
35-44 years	7	4	11	1	—	1
45-54 years	7	4	11	1	—	1
55-64 years	12	2	14	—	—	—
65-74 years	10	3	13	1	—	1
75 years and over ..	—	2	2	—	3	3
TOTAL	46	28	74	6	8	14

Table III

New cases of Non-Pulmonary Tuberculosis – Localisation and Sex

	Males	Females	Total
Nervous System	—	—	—
Meningitis	—	—	—
Intestines and Peritoneum	—	2	2
Vertebral Column	3	2	5
Bones and Joints	1	—	1
Cervical Glands	1	4	5
Other Organs (Including Skin) ..	—	1	1
Disseminated Tuberculosis ..	—	—	—
Genito-Urinary	—	—	—

Table IV

Giving the number of new cases of Tuberculosis and number on the Register during recent years

	1969	1970	1971
Number of new cases of Pulmonary Tuberculosis	68	66	74
Number of new cases of Non-Pulmonary Tuberculosis	13	19	14
Number of Pulmonary Tuberculosis cases on the register at the end of the year	2,354	2,246	2,237
Number of Non-Pulmonary Tuberculosis cases on the register at the end of the year	326	333	339

Table V

Giving the number of cases of Tuberculosis on the Register in Cardiff on 31st December, 1970 and 1971

	Pulmonary Tuberculosis		Total	Non-Pulmonary Tuberculosis		Total
	Males	Females		Males	Females	
Number of cases on register at 31.12.70	1,389	857	2,246	131	202	333
Number removed from register during 1971 through deaths from all causes	33	8	41	1	3	4
Number no longer traceable	1	1	2	1	1	2
Number removed during 1971 through leaving Cardiff to live elsewhere	6	2	8	—	1	1
Number removed during 1971 as recovery cases	27	19	46	1	3	4
Number of newly notified cases in 1971	46	28	74	6	8	14
Number of known cases who came from outside to live in Cardiff	7	5	12	—	1	1
Number of cases on the register at 31.12.71	1,376	861	2,237	135	204	339

Table VI

Immigrants 1971 (Long Stay)

Country of Origin	Number of Advice Notes Received *	Number successfully visited **	Number visited during 1971 in respect of advice notes received during 1970
COMMONWEALTH			
Caribbean	2	1	—
India	46	31	1
Pakistan	24	21	4
Other Asian	34	21	—
African	25	19	2
Others	38	27	—
NON-COMMONWEALTH			
European	15	5	1
Others	10	3	2
TOTAL	194	128	10

* Advice of Arrival of Immigrant.

** Where contact was established with Immigrant.

There was a slight decrease in the number of immigrants notified as arriving in Cardiff during 1971. Some 194 persons were notified in comparison with 208 in 1970, 218 in 1969 and 148 in 1968, when the system of monitoring the health of long stay immigrants commenced.

Difficulty is still found in tracing and ensuring that attendance at chest clinic occurs. This is mainly due to the great mobility factors in many instances where the immigrant has removed to another and frequently intraceable address before the primary visit is made. In some 66 cases during 1971, it was not possible to establish contact with the immigrant. These cases are still being investigated. During 1970, some 41 immigrants were not contacted during the year but as a result of further enquiry 10 of them were found and successfully checked.

VI—PERSONAL HEALTH SERVICES

(National Health Service Acts, 1946–61)

CARE OF MOTHERS AND YOUNG CHILDREN

Vital Statistics

Live births (registered)	4,271
Live birth rate per 1,000 population	15.4
Illegitimate live births per cent of total live births	11.0
Still-births (registered)	63
Still-birth rate per 1,000 total live and still-births	14.5
Total live and still-births	4,334
Infant deaths	87
Infant mortality rate per 1,000 live births – total	20.4
Infant mortality rate per 1,000 live births – legitimate	19.5
Infant mortality rate per 1,000 live births – illegitimate	27.3
Neo-natal mortality rate per 1,000 live births	13.3
Early neo-natal mortality rate per 1,000 live births	12.2
Peri-natal mortality rate	26.5
Maternal mortality	—

Live Births and Still-births – Sources of Notification

The following statement shows the number of live births notified as having occurred in Cardiff during 1971 according to the source of notification:—

<i>Notified by:</i>	<i>Live Births</i>	<i>Still-Births</i>	<i>Total</i>
Municipal Midwives	86	1	87
General Practitioner Delivery Unit	168	—	168
Private Midwives (Domiciliary)	—	—	—
Private Midwives (Nursing Homes)	4	—	4
Parents or Doctors	—	—	—
<i>Maternity Hospitals:</i>			
(a) Cardiff Maternity Hospital	3,091	46	3,137
(b) St. David's Hospital	2,710	44	2,754
	<u>6,059</u>	<u>91</u>	<u>6,150</u>

Notifications in respect of children born to residents of other authorities were as shown:

<i>Notified by:</i>	<i>Live Births</i>	<i>Still-Births</i>	<i>Total</i>
Municipal Midwives	—	—	—
Private Midwives (Domiciliary)	—	—	—
Private Midwives (Nursing Homes)	2	—	2
Parents	—	—	—
<i>Maternity Hospitals:</i>			
(a) Cardiff Maternity Hospital	634	20	654
(b) St. David's Hospital	1,049	12	1,061
	<u>1,685</u>	<u>32</u>	<u>1,717</u>

Transferred notifications of Cardiff cases were 29. Thus, after allowing for all transferred notifications, the number of Cardiff births notified was 4,462 and this figure was made up as follows:—

					<i>Live Births</i>	<i>Still-Births</i>	<i>Total</i>
Domiciliary	254	1	255
Institutional	4,149	58	4,207
							<hr/> 4,462 <hr/>

CARE OF MOTHERS AND YOUNG CHILDREN

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Senior Medical Officer

A. CARE OF EXPECTANT MOTHERS

The hospital confinement rate reached a new level of 96% during 1971 and both the number of deliveries at home and in the G.P. Delivery Unit fell. Cardiff's birth rate increased to 15.4. This is still below the national level of 16.0.

Ante-Natal Care

The attachment of local health authority nursing staff to general practitioners in Cardiff continued and ante-natal care was shared between hospital and family doctors.

Statistics 1971

No local authority doctors were involved in ante-natal clinics during 1971 but general practitioners staffed some of the 834 ante-natal sessions conducted by midwives in public health clinics. The average attendance was 7 expectant mothers and the total attendances numbered 5,916. These figures do not take into account the number of patients attending ante-natal clinics at general practitioners surgeries.

Maternal Deaths

There were no maternal deaths during 1971.

Care of the Unmarried Mother and Her Child

The illegitimate live birth rate in Cardiff in 1971 per 100 live births was 11.0. The total number of illegitimate births was 476.

During the year liaison between social work departments in the maternity hospitals and the health visitor responsible for domiciliary family planning and the care of the unmarried mother was maintained.

Mothercraft and Relaxation

Talks, films, demonstrations and classes were held in the hospitals and in local authority clinics. The classes organised by domiciliary midwives, health visitors and physiotherapists provided a service for 145 patients.

The Short-Stay G.P. Delivery Unit at St. David's Hospital

This Unit continues to fulfil a service for a small number of patients in Cardiff who prefer the continuity of care by general practitioners and the domiciliary midwife during pregnancy and delivery. The future of the Unit is under review by the Maternity Services Co-ordinating Committee.

					<i>Number of deliveries in the G.P. Delivery Unit</i>	<i>Proportion of total deliveries by domiciliary midwives</i>
1964 (Sept. - Dec.)	..	..	..	..	15	—
1965	..	..	..	..	147	15%
1966	..	..	..	..	309	33%
1967	..	..	..	..	329	44%
1968	..	..	..	..	305	49%
1969	..	..	..	..	342	58%
1970	..	..	..	..	233	68%
1971	..	..	..	..	168	66%

Cardiff Area Maternity Services Liaison Committee

Three meetings were held during 1971. Subjects undergoing discussion included:

- (1) Integration of maternity services provided by Local Health Authority and Hospital Services;
- (2) The provision of a Central Bed Bureau for the University Hospital of Wales Area;
- (3) Modifications of patients' record systems;
- (4) Co-ordination of Family Planning Services provided by General Practitioners, Hospital Service, Local Health Authority and Family Planning Associations.

B. BIRTH CONTROL AND FAMILY PLANNING

Family Planning Association

The Family Planning Association provides one session at Gabalfa Clinic, North Road, and Canton Clinic, Wessex Street, Cardiff, and three evening sessions at Cardiff Royal Infirmary.

Sessions and attendances were as follows:

Number of sessions	..	..	..	..	..	496
Number of new patients (including transfers)	..	..	..	..	..	2,900
Total attendances	..	..	..	..	..	14,121

48 patients were referred by the local health authority.

547 patients were referred by general practitioners.

104 patients were referred by hospitals.

2,201 patients were referred from other sources (friends and other patients).

Vasectomy

During 1971 vasectomy was performed in 556 males and at the end of the year there was a waiting list of approximately 365.

NATIONAL HEALTH SERVICE (FAMILY PLANNING) ACT, 1967

Local Authority Family Planning Service

This Service has continued to expand during 1971.

Statistics 1971

Statistics relating to the Local Authority Family Planning Service are as follows:

Sessions were held at eleven local authority premises, once a week at the established clinics, and once fortnightly in the new clinics where attendances were small. The aim is to provide a weekly family planning session at each of the main clinics or health centres. There was an overall increase in the number of attendances.

Total number of attendances at local authority clinics ..	6,440
Number of new patients seen	1,085
Advice only	252
Coil inserted	155
Pill prescribed	548
Cap given	119
Other methods	11

Advice was given on 593 occasions altogether during the year.

Free treatment was given to 743 patients.

Cervical cytology was done in 1,557 cases.

Total number of patients attending joint hospital local authority family planning clinic	1,946
Number of new patients seen	576
Total number of patients attending St. David's Hospital	529
Number of new patients seen	194

Seven doctors are at present providing the family planning service, usually at the rate of one or two sessions each per week.

Domiciliary Service

1,295 domiciliary visits were made by the health visitor in connection with family planning advice to patients with special social needs and where necessary a doctor visited the home.

An expansion in the domiciliary service was commenced in 1971 with the help of a financial grant from the Urban Aid programme. A free service was provided for persons in need – the main groups being defined as:

Young problem families;
Unmarried mothers in the post delivery period;
Post-abortion patients.

Two additional weekly clinics were opened in the areas of greatest need. Domiciliary visits were carried out by one full-time and one part-time health visitor, supported by doctor's visits where the patient was reluctant or unable to attend a clinic. Three doctors are at present providing this service.

General practitioners are closely involved with the domiciliary service and intensive follow-up of patients is carried out.

C. SPECIAL CLINICS

Annexe to Cardiff Royal Infirmary

During 1971, 15 ante-natal mothers were referred to the clinic.

The following diagnoses were made:

Syphilis	..	..	..	..	..	..	..	—
Gonorrhoea	..	..	..	..	..	..	..	2
Other conditions requiring treatment	..	..	..	..	..	..	..	7
Other conditions not requiring treatment	..	..	..	..	..	..	..	6
								—
								15
								—

The venereologist in charge of the clinic at Cardiff Royal Infirmary comments that there has been a marked reduction in the total cases referred in 1971. This is due to two factors:

- (1) Obstetricians are screening 'at risk' patients for gonorrhoea in the ante-natal clinics. Only those actually suffering from the disease are referred to the Venereology Department.
- (2) In previous years single girls residing at the Mother and Baby Home in Cowbridge Road were sent to the clinic for routine screening. There has been a very substantial reduction in the numbers of these girls due to (a) a more liberal attitude to illegitimate pregnancies; and (b) the availability of therapeutic abortion for suitable patients.

Cervical Cytology – Cardiff Survey

Testing has continued throughout 1971 with a slight increase in the total number of examinations over previous years.

1965	..	8,068
1966	..	23,117
1967	..	22,394
1968	..	22,736
1969	..	22,696
1970	..	24,921
1971	..	28,688
		—
		152,620
		—

8,129 women had their first cytology test under the Cardiff scheme during 1971, making a total of over 83,000 women examined since the beginning of the scheme in 1965. It is believed that approximately 75% of those tested are within the study population, i.e. ever-married, aged 25–69 and resident within the city.

Over 20,000 routine repeat tests have been performed at voluntary clinics (7,450 in 1971) and there have been approximately 5,000 recalls at twelve months because of a previous atypical smear (1,821 in 1971). The remainder of repeat tests have occurred at gynaecologists' clinics, family planning clinics, etc. In addition, there were 1,345 consultations at Richmond Road clinic during 1971 (including 187 colposcope examinations) for patients with abnormal cytology or for follow-up after treatment.

By the end of February 1971 every house in the city had been visited by the team employed by the Medical Research Council and the Ministry of Health for the purpose of acquainting all adult women residents with the facilities for cervical cytology testing and recording their response. The number of women of electoral age registered between 1965 and 1971 was approximately 92,000. Of these some two-thirds met the requirements of age (25–69 years) and civil state (married or previously married) for inclusion in the special study of response rates for which Cardiff was chosen. Response rates varied from 52% to 71% in different Electoral Areas, being highest in all areas among younger women and disappointingly low in those over the age of 55.

The recall – at intervals of two to three years on average – of those tested is now proceeding but many women have been found to have moved from their original address and the proportion of repeat tests is only about 60%. It is hoped that some means can be found to improve this figure.

Number of Examinations during 1971

	Examined for the first time	Repeat Examinations	Total	
			No.	%
Voluntary Clinics	860	9,970	10,830	37.7
Works and Office Premises	14	78	92	0.3
Home Tests by S.R.N.	136	568	704	2.5
Problem and Welfare Families and Local Health Authority Family Planning Clinics	291	1,388	1,679	5.9
Gynaecologists' Clinics	4,016	5,266	9,282	32.3
Family Planning Association	1,554	1,776	3,330	11.6
General Practitioners	585	596	1,181	4.1
Radiotherapy	11	29	40	0.1
Glamorgan County Council Clinics (including Family Planning Clinics and Local Health Authority Family Planning clinics)	662	888	1,550	5.5
TOTAL	8,129	20,559	28,688	100.0

D. INFANT AND CHILD HEALTH

Infant Deaths

There were 87 infant deaths in 1971, 10 of these were infants who died suddenly at home. This approximates to the national figure of about 1 in 400. In only 4 of these was there evidence of infection.

Care of Premature Infants

Statistics relating to prematurity (after correction for transfers) are shown in the following tables and the table on page 23.

Number of Premature Live Births notified:

(a) In hospital	309
(b) At home or in a nursing home	3
	<hr/> 312

Number of Premature Still-Births notified:

(a) In hospital	35
(b) At home or in a nursing home	—
	<hr/> 35

Child Health Centres

The number of children who attended Child Health Centres in 1971 was 9,738. The average attendance of children at clinics was 43 and 1,583 sessions were held during the year, total attendances were 67,947.

Screening Tests in Infancy

(1) Phenylketonuria and Allied Metabolic Disorders

Routine screening with the Woelf amino-acid chromatography test continued, using the service provided by the Department of Metabolic Medicine at Cardiff Royal Infirmary. Requests for urine specimens following abnormalities discovered during screening numbered 87; and of these 9 remained abnormal while one repeat test was refused by the parents.

Weight at birth	PREMATURE LIVE BIRTHS													PREMATURE STILLBIRTHS
	Born at home or in a nursing home													
	Nursed entirely at home or in a nursing home				Transferred to hospital on or before 28th day				Died					
	Total Births (1)	within 24 hrs. of birth (2)	in 1 and under 7 days (3)	in 7 and under 28 days (4)	Total Births (5)	within 24 hrs. of birth (6)	in 1 and under 7 days (7)	in 7 and under 28 days (8)	Total Births (9)	within 24 hrs. of birth (10)	in 1 and under 7 days (11)	in 7 and under 28 days (12)	Born	
in hospital (13)													at home or in a nursing home (14)	
1. 2 lb. 3 oz. or less ..	15	6	2	—	—	—	—	—	1	—	1	—	8	—
2. Over 2 lb. 3 oz. up to and including 3 lb. 4 oz. ..	29	3	9	1	—	—	—	—	—	—	—	—	8	—
3. Over 3 lb. 4 oz. up to and including 4 lb. 6 oz. ..	46	5	4	1	1	—	—	—	1	—	—	—	9	—
4. Over 4 lb. 6 oz. up to and including 4 lb. 15 oz. ..	84	—	1	1	1	—	—	—	1	—	—	—	3	—
5. Over 4 lb. 15 oz. up to and including 5 lb. 8 oz. ..	135	—	3	—	1	—	—	—	—	—	—	—	7	—
6. TOTALS ..	309	14	19	3	3	—	—	—	3	—	1	—	35	—

1—1,000g, or less; 2—1,001 – 1,500g; 3—1,501 – 2,000g; 4—2,001 – 2,250g; 5—2,251 – 2,500g.

1—1,000g, or less; 2—1,001 – 1,500g; 3—1,501 – 2,000g; 4—2,001 – 2,250g; 5—2,251 – 2,500g.

Towards the end of 1970 a Metabolic Clinic was set up to which all infants who had persistent abnormalities in liquid urine specimens were referred.

The City of Cardiff Health Department were responsible for the administrative arrangements for this clinic and the staff consisted of a consultant paediatrician, local authority senior medical officer, biochemist, geneticist and dietician. This is a further welcome example of a co-ordinated hospital/local authority approach to a problem that involves both sides. Three children from outside Cardiff with phenylketonuria were examined and the following Cardiff children were seen:

Born before 1971 and reviewed:

Phenylketonuria	2
Galactosemia	1
Cystinuria	2

1971 births:

Histidinaemia	1
Cystinuria	1
Probably normal	7

There were no new cases of phenylketonuria discovered during the year and the child with persistent histidinaemia is under regular review and appears to be developing normally.

(2) Deafness

2,034 hearing tests on infants were performed by health visitors; and 7 were found to have significant impairment of hearing.

(3) Congenital Malformations

Congenital malformations were reported as follows in 1971:

Nature of Defect	Number of Defects	Incidence per 1,000 total births
Central nervous system	30	6.90
Eye and Ear	8	1.84
Alimentary system	4	.92
Heart and Circulatory System	12	2.76
Urino-genital system	12	2.86
Respiratory system	1	.23
Limbs	33	7.59
Other	40	9.20

(4) Infants 'At Risk' of Handicap

From the inception of the 'Risk Register' in 1962 an average of 26.6% of live births were placed on it. In an attempt to reduce the size of the register a revised list of categories putting the child at risk was introduced in January, 1971; children with single categories only being included if there was a high probability of damage and others being included only if more than one factor was present. In this event the reduction in numbers achieved was small, as the number of names on the register in 1971 was 1,056.

(5) Observation Register

During 1971 the Observation Register of potentially handicapped pre-school children was under review and an attempt was being made to discriminate more clearly between children with a definite handicap, those under observation because of developmental delay and those who were apparently normal at birth but who were on the 'Risk Register'. Because of this there are no accurate figures available for the numbers of potentially handicapped pre-school children registered in 1971.

(6) (a) Developmental Screening

From January, 1971, instead of restricting formal developmental screening to babies on the 'risk register' an attempt was made to screen the development of all children at about their first birthday. This was done by the health visitor in the first instance, and 3,339 children were tested in this way. If there was any doubt about the baby's performance it was then seen by either the general practitioner or the local authority doctor.

A number of general practitioners have participated enthusiastically in this scheme, undertaking routine medical examination of their own patients at the same time as their attached health visitors performed developmental screening, and it is hoped that this trend will continue.

(6) (b) Developmental Assessment

In 1971, examinations were made of 255 children who were referred by health visitors, doctors and consultants as in need of assessment so that families could be helped and estimate made as to their educational needs for the future.

Of the 255 children, 162 were first examinations and 93 were re-examinations from previous years.

Results of Examinations

No further action and recommended to attend normal school ..	80
Recommended to attend Preswylfa Assessment School ..	24
Recommended to attend Ty Gwyn Special School	19
Recommended to attend Presswood House	9
Recommended to attend E.S.N. Schools	7
Recommended to attend Greenhill Open Air School	2
Recommended to attend Special Class at Allensbank	2
Referred to Child Guidance Clinic	1
To be considered for Residential School	1
	<hr/>
	145
Number of children to be re-examined at a later date ..	92
and the following recommendations were made in the meantime:	
Referred to Playgroup and to be seen again	5
Partially sighted and to be seen again	2
Developmental Advisory Clinic and to be seen again ..	3
Normal Nursery Schools and to be seen again	8
	<hr/>
Grand Total	255

PRESWYLFA HOUSE NURSERY SCHOOL AND ASSESSMENT CENTRE

SCHOOL MEDICAL OFFICER – GILLIAN M. BRYANT

M.B., B.Ch.(Wales), D.C.H., D.Obs.R.C.O.G.

A. Preswylfa as a Special Nursery School

(1) An annexe was opened in September, 1971, which has a medical room, staff room and physiotherapy room and very limited storage space for special equipment. This meant the four classrooms could be used for teaching purposes only and the teaching staff was expanded accordingly so that it now consists of a head teacher, three full-time teachers, a part-time teacher, four nursery nurses and a teachers' aide, the latter mainly helping in toileting and feeding.

(2) The Children*(a) Type of Handicap:*

Major Diagnosis	Left Unit	Still attending January, 1971	Total
Spina Bifida	10	10	20
Cerebral Palsy	11	6	17
Visual Handicap	5	1	6
Brittle Bones	3	—	3
Communication Problems	3	1	4
Miscellaneous	4	11	15
TOTAL	36	29	65

(b) Duration of Stay:

Prior to 1971, the average length of stay was between 3–4 terms, whilst for the 13 children discharged during 1971, the average duration of stay was 4–5 terms.

(c) Places to which children have been transferred:

	Pre 1971	1971	TOTAL
Greenhill	10	6	16
Erw'r Delyn	1	—	1
Special School for S.S.N. (Ty Gwyn)	4	4	8
Presswood House	1	—	1
Schools for Visually Handicapped ..	3	1	4
Non-communicating Unit	1	—	1
Ordinary Nursery	1	1	2
Ordinary School	—	2	2
Left Area	1	—	1
	22	14	36

The major outlets remain the special schools for the physically handicapped and the severely subnormal.

(3) Physiotherapy

The University Hospital of Wales provides the services of a physiotherapist.

Children treated at school	20
Out-patients treated regularly	9
Out-patients checked regularly	4

There are nine children who attend for physiotherapy outside school hours once or twice a week. This group includes those who are on the waiting list for the school and two who have left the school to go to ordinary schools. This group is likely to grow.

Another four children are seen less frequently for advice on treatment carried out at home by the parents.

During the school holidays, physiotherapy treatment continues at the school. Parents bring their children for appointments and ambulances are provided, when necessary. This time also proves useful for home visits to find out how the child copes in the home situation. Parents are encouraged to visit the school to discuss treatment and to be shown exercises to do at home.

An Appliances Officer from the hospital visits voluntarily for fittings.

(4) Waiting List

At present there are 14 children on the waiting list; 3 over the age of three years and 6 aged between two and three years.

B. PRESWYLFA AS AN ASSESSMENT CENTRE

(1) Long-term functional assessment of the children admitted to the nursery continues and the methods used are under continuous revision.

(2) Clinical assessment sessions have been held regularly since the annexe opened in September, 1971. Children are seen by the consultant paediatrician and/or the local authority medical officer; the majority are pupils of the school, but it has also been possible to see younger handicapped children with a view to co-ordinated planning for their future help and treatment, which may or may not include admission to Preswylfa Nursery School.

Eleven children not on the roll have been seen in this way in 1971, with an age range of 14/12 - 3 years.

The following recommendations were made:

Short term admission for more detailed assessment	..	2
Ordinary Nursery if available	.. .. .	2
Ty Gwyn	.. .. .	1
To go on Preswylfa waiting list	.. .. .	6
		<hr/> 11

Recommendations pending the above:

Physiotherapy at Preswylfa	.. .. .	2
Clinic Play Therapy Group	.. .. .	1
Peripatetic Teacher for Visually Handicapped	.. .. .	2

At the end of the morning, the children seen are discussed with the teaching staff, physio-therapist and psychologist, together with any other interested parties, e.g. specialist teachers, health visitors, general practitioners. The parents would be seen on this or on a separate occasion.

(3) Short Term Assessment

This is a new venture which it is only possible to consider since the capacity of the unit has increased and which does involve the staff in intensive work. Some children may not need permanent placement in the school, but do need intensive observation over a period before complete diagnosis can be made. One example of this is the case of a child with a communication problem, who could be deaf, autistic or aphasic. There are difficulties, however, in finding suitable pre-school places to which children can be admitted immediately after this period.

During 1971, two children were admitted for short periods; one physically handicapped severely subnormal child went to Ty Gwyn and one child with a moderate physical handicap was transferred to an ordinary nursery school.

This form of admission is likely to increase particularly in view of the increasing interest in early assessment of children with communication problems.

SUMMARY

The capacity and functions of Preswylfa have been gradually expanding since it re-opened in September 1968.

In September, 1971, with the completion of the annexe, with its separate facilities for examination and treatment, it was possible both to increase the capacity of the nursery school to its present four classrooms and to extend the work being carried out so that it has begun to function more adequately as an assessment centre.

This has been done in two ways; firstly, by establishing regular assessment sessions with the consultant paediatrician and local authority medical officer; and secondly, by admitting children for short-term assessment.

There is still scope for further expansion of the services provided at Preswylfa.

Play Therapy Groups for Very Young Handicapped Children

In the Annual Report for 1970, mention was made of the need for much earlier help for handicapped children than could be provided in a nursery school setting such as Preswylfa.

During 1971, two experimental play groups have been running, one at Trowbridge Health Centre and one at Llanrumney Clinic, at which mothers and pre-school children of any age could attend. The purposes were as follows:

- (a) To help children with a definite handicap, by providing opportunity for stimulation and other help in a play situation.
- (b) To help their parents by giving an opportunity to discuss problems with the health visitor and each other.
- (c) To provide an opportunity for observation of children without a definite handicap but about whose development there is cause for concern.

These were not a substitute for nursery school and not 'child minding'; there was a definite medical indication for admission to a therapeutic situation.

A trained nursery nurse and health visitor were present and from time to time visits were made by a medical officer, physiotherapist and teacher of the visually handicapped or the deaf.

It is early yet to assess the usefulness of this service, but it is planned to expand it to other health centres next year and then review its function.

Generous contributions towards the cost of equipment for these play therapy groups were received from the South Wales Association for Spina Bifida and Hydrocephalus and from the Cardiff and District Association for Mental Health.

Some Defects of Infants and Pre-School Children

Visual Defects

Attended clinic for the first time	..	..	..	..	791
Examined for errors of refraction	..	..	..	..	155
Spectacles prescribed	..	..	..	..	101

Nose and Throat Defects

Number examined for the first time	..	..	..	300
Received operative treatment in hospital	..	..	..	17
Received other forms of treatment at clinic	..	..	..	25
Total attendances at clinic	..	..	..	300

Developmental Advisory Clinic at St. David's Hospital, Cardiff

The multidisciplinary team has continued to meet fortnightly for the purpose of providing a comprehensive service for the families of the mentally handicapped.

Prior to attending the clinic it is necessary to bring together the relevant information regarding family circumstances, educational and social attributes of the child, together with details concerning mental and physical disabilities and abilities. This is supplemented by the knowledge gained by each member of the team from individual interviews with the parents and child, when they present themselves at St. David's Hospital.

Thus the team are able to assess the situation and decide, on the basis of group discussion, the most appropriate course of action. It is anticipated that, with the available expertise, fewer parents will think it necessary to obtain the opinion of other professional persons from outside the Cardiff area.

REPORT ON DEVELOPMENTAL ADVISORY CLINIC FROM 1st SEPTEMBER, 1970, TO 1st SEPTEMBER, 1971

1st Clinic	7.9.70
No. of Clinics held	20
No. of children seen	1st Appointments 38 Re-appointments 5 } Total 43
Both parents present in	29 cases
One parent only present	13 cases
Conference only (no parents present)	1 case

Families referred by

(1) Parents	13
(2) Consultants	6
(3) Health Visitors	18
(4) Referred back from D.A.C.	2
(5) Referral by A.M.O.	4
	—
	43
	—

Reason for referral

Request from parents re progress and management	30
Request for residential care (hospital or school)	3
	—
	33
	—

Recommendations from D.A.C.

For further investigation at hospitals, etc.	10
Provision of aids	4
Social reports requested via Dr. Lowther	4
Admission to Ty Gwyn Hostel S.T.C.	9
Admission to Ty Gwyn Nursery School	9
Admission to Ely Hospital S.T.C.	4
Admission to Ely Hospital Permanent Care	1
Admission to Residential School	1
Admission to Pengam from Ty Gwyn	1
Continued observation at Ty Gwyn and Education Psychologist report	11
Psychiatrist (Dr. Lowther) to see family	1
Referred to consultant to change medication	3
To be seen again at D.A.C.	6
To be seen again at D.A.C. (routine)	30
No further action	2
Number on waiting list	11

Particular needs not being met

Social – Need for more hostel accommodation particularly in long holiday periods.

THE NURSING SERVICES

MISS M. M. McCARTHY, DIRECTOR OF NURSING SERVICES

There was little change in the nursing services in 1971 but discussions took place on reorganisation to facilitate transfer of the services to the new Area Health Authority in 1974. Plans for a nursing management structure on the lines advocated in the Mayston Report were submitted to the Welsh Office.

There was an increase in the establishment of District Nurses in September to help with the extra work generated by the attachment of District Nurses to General Practitioners. The number of cases attended by the District Nurses continued to increase. The largest increase was in cases attended in surgeries and health centres.

The attachment of a District Nurse to a surgical team at the Cardiff Royal Infirmary continued during 1971. 507 cases were discharged from two wards concerned to the care of the District Nurses. The Domiciliary Midwives attended less home confinements in 1971, but their visits to post-natal patients again increased. This increase was largely due to a change in hospital policy which reduced the normal post-partum stay of patients from ten to seven days.

A good deal of time was given by members of the nursing staff to demonstrating their work to visitors to the department. A number of visitors from Britain and overseas were taken on visits by the Health Visitors and District Nurses. Groups of hospital nurses undertaking S.R.N. training at the Cardiff Hospitals spent a week with the Health Visitors and District Nurses and nurses taking obstetric training spent days with the Domiciliary Midwives.

DISTRICT MIDWIFERY SERVICE

Midwives in Practice

At the end of the year the midwives practising in the area were reported as follows:

(a) Institutional

- (i) Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act, 1946 153
- (ii) Midwives employed in Nursing Homes 4

(b) Domiciliary

Midwives employed by the Authority 20

Deliveries attended by Midwives

	DOMICILIARY CASES		Totals	Cases in Institutions
	Doctor not booked	Doctor booked		
(a) Midwives employed by the Authority ..	6	249	255	—
(b) Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act	—	—	—	5,833
(c) Midwives in Private Practice (including Midwives employed in Nursing Homes)	—	—	—	4
TOTALS	6	249	255	5,837

(This table related to women delivered, not, in the case of multiple births, to infants).

Statistics relating to Domiciliary Midwives

The statistics relating to the work of the service during 1971 are as follows:—

Early hospital discharges attended	2,677
48-hour hospital discharges attended	913
Housing visits to the above to arrange allocation of hospital beds	1,781
Total number of visits to patients during lying-in period	27,055
Total number of cases booked	328
Total number of cases attended	255

Part II Midwifery Training School:

Number of pupils entered school	44
Number of pupils entered examination	44
Number of pupils who passed at first attempt	41
Number of pupils who passed at second attempt	1
Number of pupils who failed examination	2

Transport

At the end of the year motor car allowances were being paid to 15 midwives using their cars in connection with the Service.

Supervision

Officers of the Department made 167 visits of inspection of midwives.

Infectious Diseases arising from Childbirth

No cases were notified during the year.

Sterile Packs

Sterile packs are made available where necessary in all cases of confinement other than in National Health Service hospitals. The number supplied during the year was 500.

HOME NURSING SERVICE

The establishment consists of the equivalent of 54 full-time district nurses. In addition 31 student district nurses completed their training during the year. The statistics relating to the work of the service during 1971 are as follows:—

Number of new cases	4,371
Cases carried over from 1971	1,697
TOTAL	6,068

Classification of cases and visits:

	<i>Cases</i>	<i>Visits</i>
Medical	4,180	146,982
Surgical	1,854	35,021
Gynaecological	34	347
	6,068	182,350
Children under 5 years of age	50	
Patients over 65 years of age	3,650	

Laundry Service for Incontinent Patients

This service is now in its thirteenth year and during 1971, 139 patients received this service.

Marie Curie Service for Cancer Patients

In 1971, 21 patients received this service on 49 nights from specially recruited nurses. This service is operated on behalf of the Marie Curie Foundation.

Night Relief Nurses

Forty-four families received relief from nurses or night sitters on 441 nights in 1971, the eleventh year since the inception of the service. The majority of patients receiving help were elderly, but some were younger people in the extreme stages of illness.

Incontinence Pads

More incontinence pads were used in 1971, especially where the requirements were short-term, e.g. when patients were awaiting hospital admission.

HEALTH VISITING

Home Visiting

A summary of the work carried out by Health Visitors is as follows:—

Children born 1971	..	..	1st Visit	..	..	4,049
Children born 1970	..	..	1st Visit	..	..	4,378
Children born 1966/69	..	..	1st Visit	..	..	11,165
Special care infants	..	..	1st Visit	..	..	376
Ante-natal visits	..	..	1st Visit	..	..	461
Persons aged 65 years or over	..	..	1st Visit	..	..	4,380
Persons aged 65 years or over visited at request of G.P. or hospital	..	..	..	..	..	1,801
Mentally disordered persons	..	..	1st Visit	..	..	115
Mentally disordered persons visited at request of G.P. or hospital	..	..	..	..	..	93
Persons discharged from hospital (excluding Maternity and Mental Hospitals)	..	..	1st Visit	..	..	381
Persons discharged from hospital visited at request of G.P. or hospital	..	..	..	..	..	206
No. of T.B. households visited	..	..	1st Visit	..	..	150
No. of households visited on account of other infectious diseases	..	..	..	..	..	100
Chronic sick under 65 years	..	..	1st Visit	..	..	291
Paediatric cases	..	..	1st Visit	..	..	75
Diabetic cases	..	..	1st Visit	..	..	202
Cardiac cases	..	..	1st Visit	..	..	246
Vaccination and Immunisation	..	..	1st Visit	..	..	180
Family Planning	..	..	1st Visit	..	..	793
Families requiring special care	..	..	1st Visit	..	..	430
Handicapped children	..	..	1st Visit	..	..	600
Phenylketonuria tests (Woolf or Guthrie)	..	..	1st Visit	..	..	315

No. of hearing screening tests at home	..	..	..	499
Health Education – visits to groups	..	..	..	144
Other special enquiries, surveys, etc.	1st Visit	..	..	4,618
Total number of visits made to pre-school children	..	..	..	52,298
Total number of visits made to school children	..	..	..	3,360
Total number of visits made to adults up to 65 years	..	..	..	5,721
Total number of visits made to persons over 65 years	..	..	..	12,157
Total	..	..	..	73,536
Ineffectual visits	..	..	..	33,442

NURSING EQUIPMENT ON LOAN

To facilitate the nursing of patients in their own homes, sick-room requisites are available at the nominal charge of 10 pence (free to senior citizens and those in receipt of financial assistance).

Larger items of nursing equipment, such as wheel chairs, commodes, hoists, etc. are supplied at a charge of 25 pence on similar terms. In addition, a free service is provided for the nursing of paraplegic patients. This entails the supplying of special types of beds and lifting services. The service was considerably augmented in 1966 when the voluntary body, Order of St. John Priory for Wales, ceased activities in this field.

Figures in brackets are those for the previous year.

	<i>Deliveries</i>	<i>Returns</i>
Air Rings	44 (112)	22 (88)
Bed Rests	288 (356)	128 (112)
Bed Pans	175 (227)	83 (97)
Bed Cradles	132 (154)	60 (59)
Commodes	418 (583)	128 (316)
Invalid Chairs	425 (389)	168 (160)
Walking Sticks	118 (119)	23 (27)
Walking Aids	273 (241)	85 (86)
Fracture Boards (sets)	14 (34)	1 (1)
Urinals	118 (66)	Nil (2)
Mackintosh Sheeting	423 (334)	<i>Non. Ret.</i>
Crutches (pairs)	71 (104)	40 (70)

The amount of £988 was spent on providing additional equipment during the year, thus making a total of £9,610 since 1966. The income from charges amounted to £302.03.

CARE OF THE ELDERLY

By JOHN N. P. HUGHES, M.B., B.Ch., D.P.H.

Despite continued increases in services for the elderly we have to report that provision is not meeting demand. The most difficult sphere is that of the mentally ill elderly person. Despite very close liaison between the various branches of health care and social work agencies, psychogeriatric facilities in Cardiff are far from adequate.

The reorganisation of the hospital services in Cardiff, which followed on the opening of the New University Hospital at Heath Park, continues. The provision of geriatric beds at the main teaching hospital is welcomed. The overall number of beds, and other supportive

services, gives rise to anxiety, however, and it is only the very dynamic approach of the consultant geriatricians which enables an effective service to be provided. We extend sincere thanks to Dr. G. E. J. Thomas who has retired during the year from his post as consultant geriatrician. He has been a much loved familiar figure in the city for many years and his great contribution in caring for our senior citizens is most appreciated. Dr. F. L. Willington was appointed to succeed Dr. Thomas and in addition during the year a new consultantship in geriatrics was established, to which Dr. C. A. R. Pippen was appointed. This increase in the number of consultant geriatricians is welcomed and it is hoped that sufficient supportive general medical staff might be recruited to further improve this part of the service.

The Social Services Department set up during the year has not yet completed its initial organisational pattern. Much difficulty in effecting communication between members of the Health Department staff and field workers of the Social Services Department is occurring. It will be a major priority in the future to make this communication as effective as that which existed formerly over many years with the city's Welfare Department.

Population

During April 1971 the Registrar General undertook his decennial census. This showed that of the total population of the city some 12.9% were aged 65 years and over. There were 35,940 persons, 13,350 males (40%) and 22,590 females (60%). In 1966 the special sample census revealed that 12.3% of the city's total population was 65 years and over. This corresponded with the national situation at that time, a similar percentage of the population of Gt. Britain being aged 65 years and over. Once again the population figures for Gt. Britain show that 12.9% are in this group. The city accurately reflects the national average with an increase of 0.6% over the previous census figures.

The Registrar General forecasts that by 1977 there will be a further increase of 4% in the numbers of elderly persons living in the city and that this figure will itself be increased by a further 4% in absolute numbers by 1982.

Geriatric Register

An analysis of the index of cases of persons over 65 years of age in the city who were known to be 'at risk' at the end of 1971 is shown below.

			<i>Total</i>	<i>65-74 years</i>	<i>75 years and over</i>
Females	..	..	4,851	1,257	3,594
Males	..	..	1,924	547	1,377
Persons	..	..	6,775	1,804	4,971

The 6,775 persons formed 16% of the total of the city's population of persons over 65 years. This is an increase of 5.4% in numbers on the register during the past year. The ratio of females to males is over 2 to 1 and almost 3 to 1 in the older age groups.

THE PROPORTION OF THE GERIATRIC POPULATION IN RECEIPT OF VARIOUS SERVICES PROVIDED BY THE DEPARTMENT

Home Nursing	..	3,650 cases during the year received 128,115 visits or 10% of population over 65 years (c/f 9.6% in 1970 and 8.2% in 1969)
Home Help	..	3,101 cases during the year received regular help or 8.6% of population over 65 years (c/f 7.8% in 1970, 7.1% in 1969 and 5.5% in 1968)

Chiropody	..	4,903 cases received treatment or 13.6% of population over 65 years (c/f 13.0% in 1970, and 12.3% in 1969)
Health Visiting	..	6,827 cases visited during year or 19.0% of population over 65 years (c/f 17.4% in 1970, 16.9% in 1969 and 14.9% in 1968)

Geriatric Liaison Health Visitors

During the year 1,630 new cases were dealt with by the Section, and a total of 4,109 visits were made. Although slightly fewer cases were seen, the increasing complexity of their problems is reflected in the fact that the number of visits remained at the same level. Some 550 of these cases were for social assessment at the request of the Hospital Geriatric Consultants. 1,464 hospital discharge cases were routinely visited. There were some 32 cases attending geriatric day hospital who also required visits.

During the year medical officers working in association with this Section made a large number of visits to patients with particularly difficult problems. Three doctors are involved in this work and give the equivalent support of one full-time medical officer. A particular part of their activity concerns the assessment of cases for the Social Services Department regarding suitability for residential care, adaptation to environment, and provision of aids and equipment.

Health Visiting of the Elderly by staff attached to General Practitioners

At the end of the year, some 5,197 cases were in receipt of visits from Health Visitors attached to general practices. These cases received a total of 12,157 visits during the year. There was an increase of some 8% over the previous year's total in cases known, and an 8.5% increase in visits made.

Geriatric Cases known to Health Visitors

Area	1971
Roath	785
Gabalfa	534
Sploot	263
Grange	304
Canton	777
Ely	659
Llanrumney	334
College Farm	177
Fairwater	368
Llanishen	173
Butetown	98
Whitchurch	172
Rhiwbina	198
Trowbridge	325
Llanedeyrn	30
	<hr/>
	5,197

Place of Death

Fifty-three per cent of persons aged 65 years and over died in hospital in the city. This compares with 58% in the previous year.

The remaining 47% died in their own homes.

Court Orders

A number of cases were referred for compulsory action for removal to hospital or hostel but most responded to intensive persuasion. However, two cases required action by this means under the National Assistance (Amendment) Act, 1951, S.1.

ACTIVITIES OF OTHER DEPARTMENTS AND ORGANISATIONS IN THE CITY CONCERNED WITH THE WELFARE OF THE ELDERLY

Social Services Department

At the end of the year some 602 places for elderly persons were provided in 16 Homes. The Authority supported 681 permanent elderly residents, 86 of these were in Homes provided by voluntary bodies. 26 were in Hostels provided by other authorities, but all financially recompensed by Cardiff City Council. 163 new permanent elderly residents were accepted during the year and a further 203 were taken as short term cases for holiday relief.

A considerable and most satisfactory increase in the number of Meals on Wheels has occurred. This means that virtually throughout the city meals can be delivered daily Mondays to Fridays for most persons in need.

						<i>Lunches Served</i>
Day Centres	Butetown	..	..	..	..	10,323
	Gabalfa	..	..	..	..	15,917
	Swansea Street, Splott	..	..	..	..	13,715
	Bangor Street, Roath	..	..	..	..	17,795
	Clydach Street, Grange	..	..	..	..	15,484
	Wyndham Street, Riverside	..	..	..	..	11,576
	Minehead Road, Llanrumney	..	..	..	..	9,271
	Grand Avenue, Ely	..	..	..	..	25,441
	Harriett Street, Cathays	..	..	..	..	11,979
Luncheon Clubs	St. Mary's, Whitchurch	..	..	..	..	2,638
	St. Hilary, Rumney	..	..	..	..	1,602
	All Saints, Llandaff North	..	..	..	..	1,332
	Llanedeyrn	..	..	..	..	2,148
	Rhiwbina (closed temporarily)	..	..	..	..	1,297
	Fairwater (opened June 1971)	..	..	..	..	2,297
Meals-on-Wheels	..	..	..	..	..	76,195
Total						219,010

City Housing Department

Number of one-bedroomed units erected in 1971	..	47
Total of one-bedroomed units (mainly for elderly people) at the end of 1971	..	3,095

Each of these dwellings erected since 1961 has been provided with background central heating.

Voluntary Community Service

This organisation of groups of young persons continues to contribute many items of service for the elderly in the community not otherwise available. These include decorating, gardening and various odd jobs in addition to voluntary visiting.

Voluntary Emergency Social Transport (V.E.S.T.)

This voluntary organisation was set up during the year. It provides transportation by car, mostly for elderly people in social need, as well as for a number of other worthwhile contingencies. As far as this department is concerned help has been given transporting elderly people to our clinics, so that they may receive chiropody treatment. This has meant that in addition to receiving a most worthwhile preventive health service, the loneliness of the elderly people concerned has to some extent been alleviated.

Council for Social Service

This body continues to support in many different ways various aspects of work with the elderly in a most excellent fashion. During the year they produced a directory of services for the elderly available within the city. This has been widely distributed amongst statutory and voluntary organisations and has proved a most acceptable aid to the many people working in this field.

CHIROPODY SERVICE

The Department maintained similar arrangements with the panel of chiropodists for the treatment of patients at clinics, surgeries and in their own homes as has previously been described in annual reports. Almost all the patients were of retirement age or over. The waiting list has increased to 451.

Table I	Number of patients registered	4,903
	Number of patients on waiting list	451
	Number of chiropodists	22
	Number of treatments given:	
	at Surgery	13,209
	at Home	3,735
	at Clinics	4,519
		<hr/>
		21,463

Table II	Number of patients registered of retirement age or over	4,860
	Number of patients registered as expectant mothers ..	1
	Number of patients registered as handicapped persons	42
		<hr/>
		4,903

In addition to the arrangements provided directly by the Department, grants were made to the Women's Royal Voluntary Service to maintain chiropody services at Day Centres for the aged at Grangetown, Gabalfa, Riverside, Splott, Llanrumney, Ely, Roath, Cathays, Whitchurch Luncheon Club.

AMBULANCE SERVICE

A further increase in demand for the service is shown below in the statistics for 1971.

The number of patients carried shows an increase over 1970 of 4,373, i.e. from 130,890 to 135,263, and the mileage increased from 509,278 to 545,005, an increase of 35,727 miles.

Analysis of Journeys from 1st January to 31st December, 1971

	<i>Journeys</i>	<i>Patients</i>	<i>Miles</i>
(a) Patient-carrying Journeys:			
Emergency	13,225	13,799	106,526
Accident	2,799	3,115	16,545
Out-patient	36,647	107,338	350,884
Others	3,996	11,011	54,658
	<hr/>	<hr/>	<hr/>
	56,667	135,263	528,613
(b) Depot Service and Abortives	2,796	—	16,392
Transporting Persons other than Patients ..	—	—	—
	<hr/>	<hr/>	<hr/>
	59,463	135,263	545,005

					<i>Patients</i>	<i>Miles</i>
(c)	Stretcher cases	..	..	..	34,259	196,586
	Sitting Cases	..	..	..	101,004	332,027
					<hr/> 135,263	<hr/> 528,613

HEALTH EDUCATION - 1971

The Health Education Unit distributed a wide variety of posters and leaflets to clinics, members of the public and to general practitioners for display in their surgeries. The extent of the Unit's activity during 1971 can be seen from the following summary of work.

1. 'Five Day Plan' Group Therapy Courses

Four such courses and three 'follow-up' sessions, involving 23 evening sessions, were held at the Municipal Offices. A total of 118 enrolments were recorded and of these 80% successfully completed the course. The Education Department of the Seventh Day Adventist Church co-operated closely with the Department in the running of these sessions and provided the psychologist for the courses.

In January, with the publication of the Royal College of Physicians' Report 'Smoking and Health Now' and the Health Education Council's publicity stressing once again the dangers of smoking, it was thought to be an appropriate time to arrange a special Group Therapy Course.

To this end the Conference Hall at the Temple of Peace and Health, Cathays Park, Cardiff, was secured for five evenings.

An intensive publicity campaign commenced on the 1st November and posters, leaflets and other publicity material was distributed to clinics, general practitioners' surgeries, members of the Cardiff Chamber of Trade and Commerce and many other such places. The Press and Television Companies also gave the fullest possible publicity to the course.

The Seventh Day Adventist Church provided a Minister/Psychologist for each session, a copy of the Five Day Plan and the 'Good Health' magazine, to each member of the course and all posters and leaflets for the campaign. In addition they made a contribution towards the cost of hiring the conference hall.

Eighty-two enrolled on the first evening and although this dropped to 65 on the third evening, 62 attended on the fifth and final evening and, therefore, successfully completed the course.

2. Visits to Schools

During the year 87 visits were made to Cardiff Schools. Films on venereal disease and sex education (including 'Half a Million Teenagers' and 'Learning to Live') were shown at 27 high schools. 40 visits were made to junior schools for the purpose of showing films on anti-smoking (including 'Smoking and You' and 'This is Your Lung') and 20 visits to show a selection of films on personal hygiene and general health care. Other health education talks were given by health visitors and medical officers at routine school visits.

3. Other Visits

The following films with suitable talks were shown to other groups as indicated:

'Emergency Resuscitation'

This film was shown to the British Red Cross Society, Colleges of Education, Student District Nurses and Youth Clubs.

'To Janet a Son'

Was shown at Mothercraft sessions both at local authority clinics and hospital premises and to various other organisations including Young Wives' Clubs.

'Your Good Health'

The Department's own film explaining the personal health services available in the city was shown to Student District Nurses, Pupil Midwives, Health Visitors, students at various Colleges of Education and other groups and organisations.

'Half a Million Teenagers'

This American film gives clear information on gonorrhoea and syphilis and was seen by students at Llandaff College of Education, members of Youth Clubs and Y.M.C.A.

5. General Health Education

Health Visitors were shown a film entitled 'Stress'. It observed the situations in five families where there is a handicapped child, an epileptic, a subnormal, an autistic and two spastics and parents speak of the effect of having a handicapped child in the family.

The regular programme of general interest films shown at Old People's Centres continued and 25 visits were made.

Visits were also made to the Welsh League of Youth Centres, Young Wives' Clubs and Youth Clubs and members were shown suitable films on health topics.

At Christmas a programme of entertaining films was once again provided for the members of Ty Gwyn and Pengam Centres.

6. Other Lectures

Medical Officers from the department gave lectures to students at the College of Education, Cyncoed, College of Commerce and Food Technology, Llandaff Technical College, and to student health visitors, district nurses and public health inspectors.

Talks included such items as anti-smoking, sex education, the problem of the aged and the handicapped child as well as various aspects of the work of the Public Health Department. In addition Medical Officers visited Day Centres, student nurses at Sully Hospital and various other bodies and organisations in the city.

The Health Education Unit arranged for suitable films and slides to precede many of these lectures and a great deal of discussion and thought was provoked.

7. Courses, Conference, etc.

- (a) Following the Mayston Report emphasising the need for management training for nursing staff, a First Line Management Course for these staff was held at Ty Gwyn Hostel from 8th - 12th February.

- (b) A week-end refresher course for health visitors and clinic nurses, on the handicapped child and the school health service was held at Ty Gwyn Centre from 19th - 21st February.

Both courses proved to be very successful and it is hoped to arrange similar ones in the future.

- (c) The Institute of Health Education, in collaboration with the Gerber Baby Council, arranged a one day symposium on Food, Science and Health Education at the Angel Hotel on 8th July, 1971.

During the morning session papers were presented by Professor M. N. Naylor, Professor of Preventive Dentistry, Guy's Hospital, London, on 'Dietary Control of Dental Decay' and by Professor E. Stroud, King's College Hospital, London, on 'Infant and Child Nutrition'. Both speakers proved very interesting and used slides to illustrate their subject.

The afternoon session was directed entirely to a Panel Discussion on the 'Implication for Health Education'. The Panel was chaired by myself and included speakers from the morning session and other experts from the fields of Nutrition and Health Education.

- (d) The Health Education Council held a Regional Conference at the Guildhall, Swansea, from 4th – 8th October. A varied and interesting programme on the techniques of health education was arranged and various members of the Council contributed to the open discussion.

The course was well attended by officers of the Department and other persons actively engaged in the field of health education.

8. Exhibitions and Campaign

- (a) 'Community Care Week' was organised from 3rd – 9th October and combined Welsh 'Old People's Week' and the National 'Help the Disabled Week'.

The purpose of the 'Week' was to inform the public of the various services available to the elderly and handicapped and to stimulate in the community a sense of increased responsibility for these groups.

To this end each of the Department's clinics and health centres staged an exhibition. Although the standards varied, these types of projects obviously stimulated the public's interest.

- (b) '*Don't Hoard Medicines*' Campaign

A number of campaigns of this kind have been held in the past. For example, Cardiff in 1969 and Flintshire during March of this year. This campaign, held during the first fortnight in May, and throughout the geographical area of Glamorgan, to include Cardiff, Swansea and Merthyr Tydfil, covered almost half the population of Wales and was believed to be the biggest of its kind ever undertaken.

The Local Authorities of Glamorgan, Cardiff, Swansea and Merthyr Tydfil joined forces with the South Wales Constabulary and the respective Pharmaceutical Committees. An intensive publicity campaign was launched, aimed at discouraging the public from hoarding medicines and helping them to destroy old medicines during the campaign fortnight. This was achieved by inviting the public to take unwanted medicines to their local chemists and for the police to collect these medicines and arrange for their destruction.

As well as acting as a co-ordinating body, the Department was responsible for the publicity arrangements within the city. This involved distributing 32,000 leaflets, 1,000 posters, bus and car stickers throughout the various Departments of the Authority as well as departmental stores, offices and other places of employment. The local newspapers and the Television Companies also gave the fullest possible publicity to the campaign. The total cost of this publicity being £125.

The campaign resulted in 2,903 lbs. of tablets being collected throughout the geographical county, including 794 lbs. collected by the Cardiff Police Division.

During the first week of June, a survey was conducted and 353 householders in the city were interviewed. 303 people knew of the campaign, although over half this number did not possess old medicines. Of the 145 who did, 114 destroyed them themselves. It would appear that for every person who returned medicines to their local chemists, many more destroyed medicines in their own homes.

COUNCIL HOUSING ESTATES AND MEDICAL REHOUSING

Vacant houses inspected	..	..	..	..	..	1,129
Number found verminous	..	..	..	..	..	90
Number requiring disinfecting	..	..	..	..	..	90
Other houses disinfected at request of Estates Department						—
Visits regarding transfers	..	..	..	..	..	316
Visits to council house applicants	..	..	..	..	..	237
Miscellaneous visits	..	..	..	..	..	337
Number of interviews at office	..	..	..	..	..	187
Number of visits in connection with home dialysis	..					133

Consideration was given during the year to a total of 994 applicants for rehousing. Of these, 394 were requests for transfers, of which 106 were recommended. The 600 applications for rehousing on medical grounds were dealt with as follows:

Recommended immediate rehousing	..	..	..	95
Awarded medical points	..	..	..	46
No action recommended	..	..	..	459

Of the 95 recommendations for immediate rehousing, 52 were in respect of old age pensioners. This shows a small increase over the previous years.

The medical conditions cited by the 600 applicants for priority for rehousing or transfers are broadly classified as follows:

Pulmonary tuberculosis	..	..	..	..	4
Non-pulmonary tuberculosis	..	..	..	..	2
Asthma, bronchitis and other chest complaints	..	..	..	..	130
Nervous complaints and mental illness	..	..	..	..	140
Heart conditions	..	..	..	..	66
Rheumatism and arthritic conditions	..	..	..	..	54
Skin conditions	..	..	..	..	5
Physically handicapped	..	..	..	..	36
Other illnesses	..	..	..	..	163

Nervous complaints formed the largest single category of complaints. The general pattern of ailments remains as in 1970 with a slight decrease in arthritic conditions and slight increase in skin conditions. 'Other illnesses' include those which could not accurately be placed in any other category. They consist of a wide variety of complaints and occasionally conditions which are not primarily of medical concern.

Home Dialysis

There are at present within the city four council houses in each of which one room has been adapted to receive and treat patients with renal failure. It is anticipated that possibly six patients a year will require home dialysis treatment. Two persons received transplants. To date the transplants appear to have been successful. The four houses converted for use for home renal dialysis have involved the selection of premises with two ground floor living rooms, one of which was adequate for conversion and installation of the necessary equipment to carry out the full home renal dialysis treatment. Water-proofed sealed vinyl floors were fitted, additional plumbing and electrical points and lights installed and the walls of the rooms treated in such a manner as to render them easily cleansed and free from dust.

If a patient now residing at one of these properties receives a renal transplant then this house will be maintained for future cases which are expected to arise within the city boundary. Two such houses are now in this category.

During the year, one portable unit, namely a Portakabin, was purchased and sited in the rear garden of a privately owned house.

All service connections were made and the unit is in service as a Renal Dialysis unit.

It is anticipated that a further four units will be required in the coming year.

VII—DENTAL SERVICES

REPORT OF H. V. NEWCOMBE, L.D.S., R.C.S.

Principal School Dental Officer

	As at 31st December 1970	As at 31st December 1971
Full-time permanent officers	7	7
Full-time temporary officers	1	2
Part-time officers	6	6
Actual strength in terms of full-time officers ..	10.2	11.4

Staff Changes: In July Dr. A. Streiberg retired, having served the Department conscientiously and efficiently since her appointment in 1965 – the staff wishes her a long and happy retirement.

At the close of the year Mr. W. Smillie retired from his post as a full-time temporary officer but it is expected that he will return on a sessional basis early in 1972. Concurrently Mr. Davies relinquished his full-time duties with us in order to take up a position in private practice. Mrs. I. Dwyer – after her recent confinement – returned to duty early in August and in November Mrs. C. P. Gretton joined the staff on a sessional basis.

The prolonged postal strike occurring in the early part of the year initially gave some cause for concern in regard to the extent to which it might adversely affect the attendances of patients for dental inspection and treatment at the city's clinics. Fortunately, by arrangement with head teachers, clinic appointments were made 'through the schools' whilst health visitors were most helpful in delivering appointment cards at the homes of patients.

Due to these and other counter measures taken at the time, the effect on the attendance rate was greatly minimised.

In the following statistics, figures relating to the current year are compared with the corresponding figures for the previous year.

Dental Inspections: There was a slight increase (0.21%) in the overall number of inspections, i.e. at school and at the various clinics.

A slightly improved situation in regard to the children's dental condition is suggested by a reduction of 2.8% in the number who required treatment.

The acceptance rate for treatment showed an improvement – 78.1% against 67.6% last year. The number of children treated for the first time increased by 1,500 or 18.7%.

Treatment

In the case of teeth filled there was an overall increase of 2.7%; in the 10–14 years age group, however, the increase per cent was slightly more than doubled (5.5%).

Total number of teeth extracted (all groups) showed a substantial fall, 7,080 against 8,214 last year.

The ratios of teeth filled to teeth extracted in 1970 and 1971 were respectively 1.9 : 1.0 and 2.24 : 1.00, whilst in the case of permanently filled teeth to permanent teeth extracted the corresponding ratios were 4.9 : 1.00 and 5.6 : 1.00.

In the orthodontic sector, the volume of work carried out was less than in the previous year, although 20 more cases were referred to Consultants.

The overall numbers of children fitted with dentures has fortunately remained low (15), although these were four more than that of last year; the figure for dentures supplied were respectively 16 and 12. The volume of work carried out for the more advanced types of restorations, viz: root treatments, inlays and crowns, whilst remaining small in relation to that in other sectors of treatment was, nevertheless, substantially above that for 1970, the respective figures being 212 (111), 8 (1) and 86 (38). On the Maternity and Child Health side gains predominated in most sectors of treatment carried out, notable exceptions being in the case of extractions for mothers and pre-school children and in the number of dentures supplied, the experience in this context being in parallel with that for school children. The number of teeth filled in the case of pre-school children increased by 5.8%, whilst extractions fell by 29.3%, giving a ratio of teeth filled to teeth extracted of 2.6 : 1.00, the corresponding ratios in 1970 being 1.73 : 1.00.

An increase in the number of teeth conserved is also recorded for expectant and nursing mothers and a decrease in the number of teeth extracted, the relevant figures being respectively 27.3% and 22.6%. Again the ratio of teeth filled to teeth extracted was higher, 2.30 : 1.00 against 1.40 : 1.00 last year.

As from 1st January, 1971, additional statistical information has been required by the Health Department of the Welsh Office in respect of the provision of dentures for children aged 0-4 years, and also in respect of the number of patients re-inspected. In the Cardiff Maternity and Child Health Service no children in the age group mentioned have so far been recorded as having been fitted with dentures and it is confidently expected that the future position in this respect will remain unaltered.

Dental Caries

In my annual report for 1966, I drew attention to the risks to dental health attendant upon the misuse of cariogenic substances such as syrups and welfare orange juice as supplied at the various clinics. Since that time attention has continued to be focused on these dangers and the manufacturers have themselves given warning on the labels of bottles in which these syrups and juices are supplied, of the need to dilute according to their instructions to render these drinks less harmful to the teeth: nevertheless, the controversy has continued. In a Parliamentary answer on December 16th, 1970, the Secretary of State for Social Services, in reply to the question whether he was aware of the continuing concern in the dental profession about the possible harmful effects on children's teeth of welfare orange juice and what action he proposed to take, stated that the replacement of welfare orange juice as a source of supplementary vitamin C had been under consideration in his department, particularly since the report of the Chief Medical Officer's Expert Committee on Medical Aspects of Food Policy which emphasised the dental hazards in the misuse of undiluted fruit syrups. Since the necessary vitamin C could now be made available in convenient forms which did not carry the same risks, he had decided to place no further contracts for welfare orange juice and that it would cease to be available in clinics by the end of 1971. In place of welfare orange juice and cod liver oil, he proposed, in the case of young children, a new preparation containing vitamins A, D and C to be administered in the form of drops and for expectant and nursing mothers to be provided with vitamins A, D and C in single tablet form. In compliance with the foregoing provision of the sale of welfare orange juice was discontinued on the 31st December, 1971, and the full range of vitamins as proposed became available at the Cardiff clinics.

Fluoridation

In the Health Education Council's Consolidated Report of the Conference on Dental Health Education, published in November 1971, it is stated amongst other things 'that the appropriate adjustment of the fluoride level of drinking water supplies remains the first priority in the field of caries prevention. Mandatory legislation to this end should be enacted by the Government and that every opportunity should be taken to educate parents in the value of fluoriding public water supplies'.

In December the City Council decided by a two vote majority to introduce fluoride to the city's water. The move was supported by the local press, and in its editorial one paper expressed the hope that 'this time it will succeed in winning the fight against dental decay' and added that 'it would be wrong for petty bickering and party point scoring to intervene in a fundamental public health issue which has for so long been supported as safe and effective by world medical authorities'.

Clinic Facilities

The modification of Trowbridge Health Centre to include a dental suite to which I referred in my report of last year, was completed in February. The dental equipment installed is entirely new and ergonomically designed in accordance with the modern concept of low-seated dentistry – major items such as aspirators and dental unit being completely mobile whilst the electrically adjustable chairs allow the patients to be treated in the supine position, the dental surgeon remaining seated throughout all operational procedures. A heavy demand for dental treatment in the Trowbridge area is anticipated and for this reason it is intended to operate the dental clinic on a full-time basis. At Gabalfa Clinic, phase 1, to improve the dental facilities there, has been completed; this includes an enlargement of the surgery window – thereby improving the natural lighting of the room and the conversion of an adjacent room into an office dark-room with direct access from the surgery. A dental conversion project is currently under way at Ely Clinic and is expected to be completed early in the new year.

Recruitment

As indicated in the Table at the beginning of this report, the dental manpower position at the close of the current year was less favourable than at the corresponding period last year, represented by 10.2 against a present authorised establishment of 13. Furthermore, a perusal of past annual reports reveal the frequent turnover in dental officer personnel which clearly is not conducive to the smooth running of an efficient and comprehensive School and Maternal and Child Health Service.

In order to improve matters in this respect, re-organisation of the Dental Structure would seem to be indicated. Many local authorities have already made such changes with the object of attracting and retaining staff. Over recent years it has been our experience that dental staff officers have been lost to other authorities where more senior posts for dental officers exist.

National Health Service Re-organisation

Dental Officers in the School Dental Service will be naturally concerned with the future position of the service under the proposed re-organisation of the National Health Service. In its consultation document, issued by the Welsh Office in June, reference is made to the consultative document 'The Reform of Local Government in Wales' issued in February 1971 in which the Government states that 'Local Authority personal health services will be transferred to the new health authorities and that the aim is to bring the re-organisation of Local Government and of the National Health Service into effect on 1st April, 1974, simultaneously with the re-organisation in England, "Special consideration will be given to arrangements for the future of the School Health Service".'

As regards the effects of re-organisation on existing staff, the document states under paragraph 20 that 'there will be full consultation with staff interests on the effects of the change and the rights of staff will be safeguarded'. A Welsh Health Staff Commission will be set up which will work in close collaboration with the Welsh Local Government Commission probably with a shared secretariat.

Maternal and Child Health

	Expectant and Nursing Mothers	Pre-School Children	Total
(a) <i>Attendances and Treatment</i>			
First visits	226	912	1,138
Subsequent visits	452	883	1,335
Total visits	678	1,745	2,423
Additional courses of treatment commenced ..	20	82	102
Number of fillings	420	872	1,292
Teeth filled	400	802	1,202
Teeth extracted	167	308	475
General Anaesthetics given	18	186	204
Emergency visits by patients	34	126	160
Patients X-rayed	19	11	30
Number of scalings	264	595	859
Teeth otherwise conserved	—	498	498
Teeth root filled	7	—	7
Inlays	—	—	—
Crowns	2	—	2
Courses of treatments completed during the year ..	113	592	705
(b) <i>Dentures Supplied</i>			
Number of patients supplied with full upper or lower	11	—	11
Patients supplied with other dentures	17	—	17
No. of dentures supplied	37	—	37
(c) <i>Anaesthetics</i>			
General Anaesthetics administered by Dental Officers	—	—	—
(d) <i>Inspections</i>			
Number of patients given first inspections during year	261	1,172	1,433
Number of patients in (a) and (d) above who required treatment	250	946	1,196
Number of patients in (b) and (c) above who were offered treatment	247	943	1,190
(e) <i>Sessions</i>			
Number of sessions for treatment	—	—	274
Number of sessions for Health Education	—	—	42

Fluoridation of Public Water Supplies

The Health Committee on the 26th November, 1971, resolved that the Water Committee be requested to consider adjusting the fluoride content of the city's water supply up to the level of one part per million as recommended by the World Health Organisation and the Department of Health and Social Security.

The City Council on 20th December, 1971, confirmed this decision by a two vote majority but at the Council meeting on 31st January, 1972, upon a notice of motion this decision was reversed by one vote.

VIII—VACCINATION AND IMMUNISATION

J. N. P. HUGHES, M.B., B.Ch., D.P.H.

General

During the year the Joint Committee on Vaccination and Immunisation reviewed the indications for offering vaccinations against smallpox in the United Kingdom and came to the conclusion that vaccination need not now be recommended as a routine procedure for infants. The Secretary of State for Health and Social Security has accepted this advice because the people of this country are unlikely to be exposed to infection unless they travel abroad. The World Health Organisation's eradication programme has substantially diminished the world prevalence of smallpox and the probability of its introduction into this country. Although vaccination remains a safe and reliable method of protection for the vast majority of persons, the risks of serious complications, though slight, now outweigh the risk from smallpox, in Britain.

The present routine schedule of immunisation against infectious disease, used by this authority, is as follows:—

<i>Age:</i>			
Three months	—	Diphtheria/Tetanus/Pertussis and oral polio	} Primary Course
Four months	—	“ “ “ “ “ “	
Five months	—	“ “ “ “ “ “	
Ten months	—	Measles immunisation	
Eighteen months	—	Diphtheria/Tetanus/Pertussis and oral polio	} Boosting doses
Five to six years	—	Diphtheria/Tetanus and oral polio	
Nine to ten years	—	Oral polio	
Twelve to 13 years	—	B.C.G. immunisation, if necessary	
Thirteen years	—	Rubella Immunisation (Girls)	

Travellers Abroad

Some 2,000 persons travelling abroad were immunised against cholera, typhoid, typhus or plague. A small number were given Gamma Globulin protection against infective hepatitis.

Yellow Fever Immunisation

The arrangements with regard to yellow fever immunisation continued and 939 persons were immunised and provided with appropriate international certificates. These included 97 seamen immunised on various ships visiting the area.

Vaccination against Smallpox

In accordance with the revised schedule of immunisation (see above) routine vaccination of infants ceased in August 1971.

PRIMARY VACCINATION (successful)				<i>By Public Health Dept.</i>	<i>By General Practitioners</i>	<i>Total</i>
Under 1 year	..	..	..	—	6	6
1 to 2 years	..	..	..	574	294	868
2 to 4 years	..	..	..	81	146	227
5 to 14 years	..	..	..	11	37	48
15 years and over	..	..	..	2	56	58
TOTALS				668	539	1,207

RE-VACCINATION

Under 1 year	—	1	1
1 to 2 years	—	1	1
2 to 4 years	29	23	52
5 to 14 years	19	119	138
15 years and over	573	1,275	1,848
TOTALS ..	621	1,419	2,040

The Department was responsible for 36.6% of all vaccinations.

Complications of Smallpox Vaccination

During the year, no serious complications of smallpox vaccination were reported.

Combined Immunisation against Diphtheria, Whooping Cough, Tetanus

Primary Triple	Booster Triple	Booster Diphth./Tet.	Booster Diphtheria
3,639 (24 were 5 years or older)	2,667 (291 were 5 years or older)	3,780 (3,698 were 5 years or older)	13 (10 were 5 years or older)

Primary Immunisation of Children under 5 years

Comparative Figures for the Years 1951-1971

Year	Infant Welfare and Special Clinics		Mobile Unit		General Practitioner		Total
	Number	%	Number	%	Number	%	
1951	1,806	45.5	1,857	46.7	313	7.8	3,970
1952	1,681	44.5	1,828	48.4	266	7.1	3,775
1953	1,778	46.8	1,741	45.8	282	7.4	3,801
1954	2,866	68.3	1,012	24.2	316	7.5	3,194
1955	2,277	61.2	1,032	27.8	408	11.0	3,717
1956	2,512	61.9	1,146	28.3	400	9.8	4,058
1957	2,295	63.6	891	24.6	427	11.8	3,613
1958	2,492	60.9	1,085	26.5	524	12.6	4,101
1959	2,772	65.7	924	21.9	525	12.4	4,221
1960	2,860	67.7	792	18.8	572	13.5	4,224
1961	3,255	71.3	757	16.6	557	12.2	4,566
1962	3,097	71.1	886	20.3	376	8.6	4,359
1963	3,173	74.4	545	12.8	545	12.8	4,263
1964	3,336	70.1	842	17.7	579	12.2	4,757
1965	2,942	65.8	1,085	24.3	445	9.9	4,472
1966	2,920	67.4	999	23.0	416	9.6	4,335
1967	2,594	59.9	1,033	23.9	699	16.2	4,326
1968	2,735	56.7	757	15.6	1,340	27.7	4,832
1969	2,576	69.0	616	16.5	543	14.5	3,735
1970	2,192	60.3	483	13.3	959	26.4	3,634
1971	2,350	61.5	410	10.8	1,060	27.7	3,820

Some 77.0% of children born in 1970 have now received a primary course of protection. The Department continues to co-operate with the manufacturers in studying the various types of antigens which are available.

72.3% of all immunisations were performed by the Department. A considerable number of general practitioners now follow the revised Ministry Schedule of immunisation. The figures for children born in 1969 can be considered complete now and 85.0% of these have been immunised.

Poliomyelitis Immunisation

Oral vaccine is used exclusively and the table below shows the number of primary courses of immunisation which were administered, as well as the number of booster doses given during 1971.

In view of the age at which immunisation commenced, figures for children born in 1969 might be expected to be complete, and these suggest that some 83.4% of infants born in that year have received a full course of protection.

Year of Birth	ORAL VACCINE		TOTAL
	Complete Course of three doses	Reinforcing dose	Primary Courses and booster doses
1971	1,299	—	1,299
1970	2,125	59	2,184
1969	183	1,957	2,140
1968	41	439	480
1967	138	4,003	4,141
Others	136	4,216	4,352
TOTAL	3,922	10,674	14,596

Measles Immunisation

The table shows the number of children immunised during the year.

Immunisation against Measles		
Age		No.
0-1 years ..		215
1-2 years ..		828
2-3 years ..		844
3-4 years ..		152
4-7 years ..		74
7-16 years ..		12
TOTAL ..		2,125

Some 43.6% of susceptible children born in 1969 have now been immunised against measles.

This is considered to be an unsatisfactory level of immunised population if measles eradication is to be achieved. It possibly represents a cautious approach to this form of immunisation held by some of the general medical practitioners in the area.

Rubella Immunisation

During 1971 the Department co-operated with a firm of vaccine manufacturers in further trials using a new Rubella vaccine.

All girls in the third form at high school were offered the opportunity of having a blood sample taken and checked for the presence of Rubella antibodies and to be suitably immunised using the intra nasal route should they prove to have little natural immunity.

Some 1,746 girls were tested and 578 girls were subsequently immunised. Further blood samples were taken to ensure that a suitably high antibody response had been obtained. The results so far received are favourable but are still being evaluated. This mode of immunisation may be as satisfactory as the subcutaneous route and is more acceptable to the girls, as well as being more convenient to administer.

Tuberculosis

B.C.G. Vaccine continued to be offered to the following groups of tuberculin negative persons:

- Children aged 12 to 13 years;
- Contacts of known cases of tuberculosis;
- New-born infants at St. David's Hospital;
- Student nurses and other staff working at tuberculosis hospitals.

Showing the Results of Tuberculin Tests carried out during the period 1956-1971 on pupils given B.C.G. twelve months previously

Year B.C.G. given	Number Tuberculin Tested 12 Months Later	Number Tuberculin Positive	% Tuberculin Positive	Number Tuberculin Negative	Number Re-immunised
1956	1,233	1,196	97.0	37	4
1957	1,514	1,533	97.0	41	25
1958	2,111	2,025	95.9	86	47
1959	2,851	2,774	97.3	77	77
1960	2,527	2,401	95.0	126	125
1961	3,206	3,075	95.9	131	118
1962	2,577	2,546	98.8	31	25
1963	3,440	3,188	92.7	252	233
1964	3,391	3,270	96.4	121	88
1965	3,298	3,149	95.7	144	123
1966	671	592	91.1	79	41
1967	1,264	1,239	98.0	25	19
1968	1,742	1,730	99.3	12	9
1969	2,370	2,322	98.0	48	43
1970	1,912	1,878	98.2	34	29

Anthrax Immunisation

Immunisation was offered to all workers at risk in abattoirs and knackers' yards in the city.

Number given one dose only	..	..	..	2
Number given two doses only	..	..	..	12
Number given three doses	..	..	..	10
Number given booster dose	..	..	..	35
TOTAL	..	..	..	59

B.C.G. Immunisation - Cardiff 1960-1971

Year	Number of									
	Contacts Excluding Newborn Babies			School Children				Newborn Babies Immunised		Others** Immunised
	Found to be Tuberculin Negative and Immunised with B.C.G.	Found to be Tuberculin Positive	Total	Offered Immunisation	Not* Tuberculin Tested	Tuberculin Positive	Immunised	Contacts	Non-Contacts	
1960	456	50	506	4,862	751	772	3,334	278	924	219
1961	569	29	598	5,656	779	678	4,209	361	1,193	208
1962	572	23	595	4,911	1,387	657	2,869	279	886	221
1963	403	18	421	5,274	1,212	531	3,351	399	1,377	89
1964	336	23	359	5,053	753	419	3,881	231	1,421	244
1965	399	31	430	5,266	992	342	3,932	183	1,468	356
1966	264	59	323	2,146	567	126	1,453	246	1,238	105
1967	266	65	331	2,035	354	75	1,606	280	1,284	123
1968	224	132	356	5,211	716	925	3,570	216	1,129	116
1969	224	126	250	4,931	571	860	3,047	173	1,355	101
1970	224	184	408	5,258	841	1,079	2,373	129	1,236	87
1971	194	143	337	5,865	1,018	1,181	3,048	72	1,266	6

*Includes absentees and scholars whose parents withheld consent.

**Includes students at Colleges of Further Education.

SCHOOL HEALTH SERVICE

I—MEDICAL INSPECTION

The average numbers of school children and the average attendances for the year ended December 1971 were as follows:—

	Average Number on Registers	Average Attendance
High Schools (11–18 years)	13,315	11,833
High Schools (11–16 years)	7,404	6,312
Primary and All-Age Schools	30,640	26,354
Special Schools	597	539
TOTAL	51,956	45,038

The following table shows the number of school children inspected at periodic medical inspections at schools, their physical condition and the numbers of individual children found to require treatment (excluding dental diseases and infestation with vermin) during 1971. (Column 5 shows the number of pupils who have been considered for selective medical examination and were found not to warrant a medical examination).

Age Groups inspected (By year of Birth)	No. of Pupils who have received a full medical exam- ination	PHYSICAL CONDITION OF PUPILS INSPECTED		No. of Pupils found not to warrant a medical exam- ination	Pupils found to require treatment (excluding dental diseases and infestation with vermin)		
		Satisfactory	Un- satisfactory		For defective vision (excluding squint)	For any other condition	Total individual pupils
		No.	No.				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1967 and later	684	684	—	—	4	83	79
1966	952	951	1	—	69	186	215
1965	3,300	3,298	2	—	314	719	872
1964	421	420	1	—	27	102	114
1963	34	34	—	—	2	10	11
1962	4	4	—	—	2	3	5
1961	241	241	—	2,308	21	89	96
1960	374	374	—	1,117	19	148	136
1959	103	103	—	101	5	37	35
1958	18	18	—	—	1	2	2
1957	1,377	1,376	1	—	71	167	227
1956 and earlier	1,759	1,739	—	—	105	172	256
TOTAL	9,247	9,242	5	3,526	640	1,717	2,048

The number of schools specially inspected and the numbers of re-inspections undertaken were as follows:—

						Boys	Girls	Total
Special Inspections	..	At School Clinic	..	..	..	1,057	1,135	2,192
Re-inspections	..	At School	..	..	..	232	171	403
		At School Clinic	..	..	..	960	1,055	2,015
TOTAL						1,192	1,226	2,418

Defects found by periodic and special medical inspections during the year. The table shows the number of pupils requiring treatment (T) and the number of pupils requiring observation (O).

DEFECT OR DISEASE						PERIODIC INSPECTIONS				Special Inspections
						Entrants	Leavers	Others	Total	
SKIN	..	..	..	..	T	78	119	8	205	1,670
					O	8	1	4	13	—
EYES (a) Vision	..	..	..	..	T	410	176	54	640	11
					O	—	11	1	12	—
(b) Squint	..	..	..	..	T	47	11	6	64	1
					O	3	—	1	4	—
(c) Other	..	..	..	..	T	10	11	—	21	—
					O	—	—	1	1	—
EARS (a) Hearing	..	..	..	..	T	172	61	21	254	3
					O	28	2	2	32	1
(b) Otitis Media	..	..	..	..	T	34	12	—	46	—
					O	3	—	—	3	—
(c) Other	..	..	..	..	T	14	10	3	27	3
					O	1	—	—	1	—
NOSE AND THROAT	..	..	..	..	T	185	83	17	285	57
					O	28	19	6	48	2
SPEECH	..	..	..	..	T	52	8	5	65	—
					O	14	1	1	16	—
LYMPHATIC GLANDS	..	..	..	..	T	25	5	2	32	1
					O	13	3	1	17	—
HEART	..	..	..	..	T	14	4	1	19	13
					O	23	6	9	38	—
LUNGS	..	..	..	..	T	12	6	—	18	6
					O	9	2	3	14	1
DEVELOPMENTAL (a) Hernia	..	..	..	..	T	6	1	—	7	33
					O	5	—	1	6	11
(b) Other	..	..	..	..	T	59	12	6	77	31
					O	39	2	7	48	6
ORTHOPAEDIC (a) Posture	..	..	..	..	T	31	56	9	96	4
					O	4	—	2	6	1
(b) Feet	..	..	..	..	T	145	85	18	248	32
					O	11	3	7	21	—
(c) Other	..	..	..	..	T	47	36	7	90	6
					O	9	—	11	20	—
NERVOUS SYSTEM (a) Epilepsy	..	..	..	..	T	—	1	—	1	3
					O	1	—	—	1	—
(b) Other	..	..	..	..	T	11	6	—	17	1
					O	2	—	—	2	—
PSYCHOLOGICAL (a) Development	..	..	..	..	T	6	11	2	19	1
					O	3	1	2	6	—
(b) Stability	..	..	..	..	T	35	16	1	52	1
					O	4	1	2	7	—
ABDOMEN	..	..	..	..	T	6	2	—	8	—
					O	—	2	—	2	—
OTHER	..	..	..	..	T	57	35	4	96	231
					O	14	4	1	19	64

II—'FOLLOWING UP' AND THE WORK OF HEALTH VISITORS AND NURSES

A summary of the work of the health visitors in connection with home visiting is given in the following table:—

Visits for	Total
Defects of vision	115
Defects of ear, nose and throat	82
Other defects and diseases	1,453
Scabies	163
Nursery School pupils	211
TOTAL	2,024

The following is a summary of work done by the visitors and nurses in connection with uncleanliness during the year:—

Number of:

Examinations of children for uncleanliness	104,915
Children found with vermin and/or nits	3,139
Children for whom cleansing notices issued	2,854

Health Visitors paid 757 routine and 322 special visits to schools to inspect and follow-up children reported to require treatment.

Vision Testing of Pupils in Junior Schools

In addition to periodic medical inspections, arrangements have been made for the annual vision testing of pupils who are in their last two years in the Junior Schools.

The number of children tested was 7,681 and the number found to have a vision defect requiring further investigation at the clinic was 665.

III—TREATMENT

Particulars of the treatment of minor ailments, defective vision and squint, external eye diseases, defects of ear, nose and throat, of orthopaedic and postural defects, etc., are given in the following tables:—

(a) Minor Ailments

DISEASE OR DEFECT	Number of defects treated or under treatment during the year under the Authority's Scheme	Total number of attendances at Clinics
Scabies	443	
Impetigo	58	
Other Skin Diseases	1,694	
Minor Ear Defects	82	
Miscellaneous (e.g. minor injuries, bruises, sores, chilblains, etc.)	404	
TOTAL	2,681	5,543

(b) Defective Vision and Squint

Particulars of the work of the Ophthalmic Clinics during the year are given below:—

Number of children examined	3,917
Errors of refraction	1,911
*Spectacles prescribed	1,598
Other defects or diseases treated	253
Referred to Orthoptic Clinic	79
Attendances at Clinics	6,106

*There was no change in the prescription in 60 refractions.

(c) Defects of Ear, Nose and Throat

	EAR	NOSE AND THROAT	
		Tonsils and Adenoids	Other Defects
Received operative treatment	121	209	73
Received other forms of treatment	23	33	
Total number of children examined	703	1,148	
Attendances at Clinics	1,005	1,371	

Waiting List for Operative Treatment at 31st December, 1971

Tonsils and Adenoids	301
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Hearing aids were provided for 7 children during 1971 and 97 children previously equipped were also using aids.

(d) Orthopaedic and Postural Defects

Children requiring treatment for orthopaedic and postural defects are referred to the Orthopaedic Clinic which is now maintained by the Cardiff Hospital Management Committee at specially adapted premises in an annexe to the Children's E.N.T. Hospital at Ely.

Details of the treatment provided were included in previous reports when this Clinic was part of the administration of the School Health Service. It can be reported, however, that 1,307 pupils were examined and treated at the Clinic during the year.

(e) Cleansing

(a) *Cleansing of children with unclean heads.*—It will be noted that the report of the work of the Health Visitors refers to the cleansing inspections which are undertaken each term in schools. Continual infestation of certain pupils is common in a number of families and it is also noted that certain schools show a considerably higher incidence than others. Every effort is made to ensure that children whose heads are unclean are cleansed at home by the parents. A small proportion for various reasons remain unclean in spite of advice given to parents and such children are sent for cleansing at the Treatment Centre. If this opportunity is not taken by the parents the Authority may proceed against them in the Court under the provisions of the Education Act of 1944. During the year 645 children attended the school clinic or centre for such cleansing.

(b) *Treatment of Scabies.*—Whilst scabies is no longer a problem of the same dimensions as was encountered during the war years, measures are necessary to secure effective treatment of the smaller number of persons who become infected. The Department's Treatment Centre, which is staffed as required by clinic helpers is available for the treatment of adults and children.

A summary of the work of the centre during the year is as follows:—

Number of cases treated:

Vermin and nits in head	645
Impetigo of head, face and hands	123
Cleansing baths only	62
Scabies baths (children)	443
Scabies baths (adults)	57
TOTAL	1,330

Attendances for Scabies:

School children	733
Children under school age	31
Adults	79
TOTAL	843

IV—HANDICAPPED PUPILS

The numbers of handicapped pupils known to the Department at 31st December, 1971 are shown in the following table:—

BLIND CHILDREN

At Residential Special Schools	..	..	..	6
TOTAL	..	..		6

PARTIALLY SIGHTED CHILDREN

At Residential School	..	..	..	5
At Special Classes for the Partially Sighted	..	..	..	10
TOTAL	..	..		15

DEAF CHILDREN

At Residential Schools	..	..	..	9
At Special Day Schools	..	..	..	10
TOTAL	..	..		19

PARTIALLY HEARING CHILDREN

At Special Class	..	..	..	26
At Maintained Schools (day)	..	..	..	91
TOTAL	..	..		117

DELICATE CHILDREN (Children who by reason of impaired physical condition cannot without risk to their health be educated under the normal regime of an ordinary school).

At Special Day Schools	..	..	..	17
TOTAL	..	..		17

PHYSICALLY HANDICAPPED CHILDREN

At Residential Special Schools	..	..	..	2
At Special Day Schools	..	..	..	56
Awaiting admission to Special Day School	..	..	..	9
TOTAL	..	..		67

Children attending Preswylfa Nursery and Assessment Unit	32
--	----	----	----	----	----	----

Children with Communicating difficulties attending a Special Class	8
--	----	----	----	----	----	---

EDUCATIONALLY SUBNORMAL CHILDREN

At Special Day Schools	551
At Special Classes	230
At Residential School	6
At Presswood House Diagnostic Unit	30
At Independent School	5
At Maintained Schools awaiting admission to Special Schools	76
Awaiting admission to Residential Special School	1
<hr/>	
TOTAL	899
<hr/>	

MALADJUSTED CHILDREN

At Special Class	28
At Residential Schools	1
At Independent Schools	9
At Boarding Home	7
Awaiting admission to Residential School ..	7
<hr/>	
TOTAL	52
<hr/>	

During the year 396 children who had been reported as being handicapped pupils were specially medically examined, with the following results:—

Educationally subnormal and suitable for education in a special day school or special class	158
Educationally subnormal and suitable for education at Presswood House Diagnostic Unit	20
Educationally subnormal and suitable for education at Ty Gwyn ..	11
Children recommended to remain in ordinary school	73
(21 of these children were examined and recommended for special educational treatment in ordinary school by the Educational Psychologist. Special medical examination was not considered necessary in these cases).	
Children deferred for further special medical examination	36
Children recommended for admission to a Nursery School ..	2
Pupils of Presswood House Diagnostic Unit:	
Transferred to Special Schools or Classes for educationally subnormal pupils	22
Transferred to Greenhill Open Air School	4
Pupils of Gabalfa Special School for Educationally Subnormal Children:	
Granted permission to leave before attaining the age of 16 years	10

Pupils of Woodlands Special School for Educationally Subnormal Children:

Granted permission to leave before attaining the age of 16 years	15
Blind – for admission to a Residential Special School	1
Deaf – for admission to a Residential Special School or Day School	4
Partially-Sighted – for admission to Residential Special School	2
Physically Handicapped – for admission to a Special Day School	17
Speech Difficulties – for admission to a Special Unit	4
Maladjusted – for admission to a Residential Hostel or Special School or Class	11
Recommended for Home Teaching	6

Cerebral Palsy Unit

The Physiotherapists administered a total of 2,067 treatments during the year, of which 1,117 were treatments at the Cerebral Palsy Unit. 301 home visits were also made in response to parents' requests for children to have continued treatment in their homes during school holiday periods.

The following table shows the number of physiotherapy treatments administered during the year:—

MONTH	Spastics	Spina Bifida	Miscellaneous Cases	Asthma	Plaster	Total	Number of times pupils used the swimming pool
January ..	102	40	27	5	—	174	22
February ..	85	57	19	7	1	169	85
March ..	134	70	29	7	2	242	131
April ..	68	32	20	3	1	124	51
May ..	122	54	30	7	—	213	130
June ..	110	49	34	4	—	197	101
July ..	81	38	26	4	1	150	41
August ..	25	21	15	2	—	63	—
September ..	120	57	31	—	—	208	116
October ..	87	59	32	—	—	178	60
November ..	109	62	34	—	—	205	69
December ..	74	48	22	—	—	144	81
TOTAL ..	1,117	587	319	39	5	2,067	887

SPEECH THERAPY

Miss B. M. R. Morris, Senior Speech Therapist, writes:

At the commencement of 1971, the Speech Therapy Department was as follows:

Miss M. Morris (Senior), Miss M. P. Francis (full-time) and Mrs. M. L. Clarke (two sessions), a total of 22 sessions per week.

In September 1970, the Language Unit for non-communicating children had opened at Allensbank Infant School, with six children, a teacher, but no speech therapist. Miss Francis, who had previously been treating most of these cases in other schools continued to do so, but they had to be taken to her clinic at Roath for this purpose. In May 1971, we were fortunate to secure the services of Mrs. C. Jones, M.C.S.T., who does four sessions a week at the Unit. The number of cases has now increased to nine.

Once again no answers were received to our advertisements, but from September–December we had the temporary service of Miss Y. Hornung, L.C.S.T., for four weekly sessions. She devoted all her time to the Ely area where there has not been a speech therapist since September 1969.

One hundred and thirty-nine cases were referred to her from all the Junior and Infant Schools in the area, of which she was able to see and assess 129. Of these, she considered 80 to be in need of treatment, 19 of which were urgent, and 25 needed to be kept under observation. Needless to say, none of these recommendations can be carried out.

This is the last Annual Report to be written by the present Senior Speech Therapist, who retires in July of this year.

The statistics relating to the work for the year show the number of children treated at 355. New cases admitted were 144 and the number of children discharged was 154. In addition, 107 children were being kept under observation and 187 were awaiting appointments at the end of December 1971. The speech therapists made 125 visits to schools and to the homes of children during the year.

Allensbank Language Unit

During 1971, 3 children were admitted to the Unit and 3 discharged, all to ordinary primary schools, so that the number of children in the Unit during the year has remained at 9. Unfortunately 5 of the 9 are of junior school age so that the provision of a Unit at junior level has become urgent, and it is hoped that this will be provided next year.

During this year regular monthly meetings were set up to discuss individual children, possible admissions, and also general problems of the Unit. The people present were: the class teacher, speech therapist, head teacher, educational psychologist, school medical officer, and psychiatrist; and occasionally the relevant social worker or receiving school head teacher.

AUDIOLOGY

by J. N. P. HUGHES, M.B., B.Ch., D.P.H.

During the year 11 cases of infants with significant degrees of hearing impairment were discovered. This year the increase was mainly in those with partial impairment of hearing and there was an overall slight decrease in the numbers with severe degrees of deafness. This was to be anticipated as in recent years there appeared to have been an unusually high number of infants discovered to have severe degrees of deafness in Cardiff. This has resulted in the necessity to increase the educational provision for these children at the nursery/infant level.

The level of case finding is considered to be very satisfactory and the work of the health visitors in screening and the activities of the staff involved in audiometric work within the department is considered commendable.

TABLE 1
Audiometric Screening Sessions at Schools

	1966	1967	1968	1969	1970	1971
Number of sessions	88	97	105	92	130	95
Number of children tested	2,786	3,473	3,350	2,398	4,037	3,400
Number found satisfactory ..	2,297 (82%)	3,158 (91%)	3,111 (93%)	2,193 (91%)	3,567 (88%)	2,958 (87%)
Number referred for further assessment ..	487 (18%)	315 (9%)	239 (7%)	205 (9%)	470 (12%)	442 (13%)

3,400 children were screened during their first year at school. This is some 72% of the total school entrants. More complete cover was not possible due to staff difficulties within the service. Of those screened, 87% were found to be satisfactory, and 13% were referred for further assessment at the Authority's own clinics. The small number of significant cases found were then seen by the Audiology Unit at the Children's E.N.T. Hospital. Liaison with this Unit continues to be close, with regular joint clinics being held at which the peripatetic teachers of the deaf children in the city are also in attendance.

The three partial hearing units attached to ordinary schools in the city (Nursery/Infant, and Junior at Coed Glas School, Llanishen, and Senior at Llanedeyrn High School) were all visited at least once a term throughout the year by a doctor and audiometrician to ensure that the needs of the partial hearing children were fully met. The N.H.S. hearing aid technician also continued to visit the units regularly, giving a much appreciated service, ensuring the proper functioning of the hearing aids used.

TABLE II
Hearing Assessment Clinic Sessions

	1966	1967	1968	1969	1970	1971
Number of sessions	88	95	111	129	129	135
Number of children sent for	1,207	1,336	1,569	1,822	1,826	2,010
Number attended	804	913	969	1,201	1,265	1,286
Number found to have satisfactory hearing ..	442 (55%)	476 (52%)	359 (37%)	395 (33%)	340 (27%)	549 (43%)
Number referred for further treatment ..	362 (45%)	437 (48%)	610 (63%)	806 (67%)	925 (73%)	737 (57%)

It will be seen from Table II that an increased number of cases were seen at the Authority's medical hearing assessment clinics in comparison with previous years. Of the 2,010 children sent for, some 724 (i.e. 36%) failed to attend. The problem of non-attenders at Audiology Clinics appears to be greatly in excess of those who fail to attend other types of clinic. It is possible that the parents of children with the more minor degrees of hearing impairment being investigated are unaware of the existence of the condition of their children and consequently make little effort to attend. Of the 1,286 children who attended, some 43% were found to have satisfactory hearing, whilst the remaining 57% were referred for further treatment. It was again noted that many of the cases required minor treatment only and the number of cases referred for surgical treatment was fairly consistent over the past two years.

TABLE III SEVERELY DEAF CHILDREN OF SCHOOL AND PRE-SCHOOL AGE IN THE CITY

	1971												
	Age Groups - Years								15+	Total			
	Under 4	4-5	6-7	8-9	10-11	12-13	14-15						
1. Diagnosed and attending Special Schools	1966	1967	1968	1969	1970	Total All Ages					Boys	Girls	
(a) Llandrindod Wells Residential School	6	5	6	5	6				2	—	—	1	4 } 7 3 }
(b) Other Residential Schools	3	2	2	3	5				—	—	1	—	1 } 2 1 }
(c) Whitchurch Nursery School for the Deaf	4	4	5	7	11				1	2	—	—	6 } 10 4 }
(d) Deaf and Severely Mentally Handicapped Attending Ty Gwyn School	2	2	2	2	1				1	—	—	1	1 } 2 1 }
2. Pre-school receiving home teaching by peripatetic teacher	5	3	3	6	5				—	—	—	—	3 } 4 1 }
TOTAL	20	16	18	23	28				2	2	2	1	15 } 25 10 }

TABLE IV PARTIAL HEARING SCHOOL AND PRE-SCHOOL CHILDREN KNOWN IN THE CITY

	1971											1970	1969	1968	1967	1966				
	Age Groups - Years																			
	Under 4	4-5	6-7	8-9	10-11	12-13	14-15	15+	Total											
(a) Attending Cardiff Partial Hearing Unit	Boys Girls	26	18	14	15	15	18	81	59	15	10	17	10	15	18	14	15	18	26	Boys Girls
(b) Attending various special schools for physically handicapped and ESN pupils, etc.	Boys Girls	18	15	14	14	17	10	15	18	14	14	17	10	15	18	14	14	17	10	Boys Girls
(c) Children with hearing defects attending ordinary schools	Boys Girls	85	83	100	81	59	15	10	10	100	81	59	15	10	10	100	81	59	15	Boys Girls
(d) Pre-school children under observation	Boys Girls	7	6	3	10	15	10	10	10	3	10	15	10	10	10	3	10	15	10	Boys Girls
(e) Attending Preswylfa Assessment Unit	Boys Girls	1	2	3	—	—	—	—	—	3	—	—	—	—	—	3	—	—	—	Boys Girls
TOTAL	Boys Girls	137	124	134	124	101	101	101	101	134	124	101	101	101	101	134	124	101	101	Boys Girls

Once again we must take the defects in defined categories of classes appearing in Tables III and IV as severely deaf or partial hearing respectively. We adhere to the Department of Education and Science's criteria and children who may have similar levels of audiometric impairment, but who are being educated in differently named establishments, may appear under either category. Table III shows a slight decline in the numbers of severely deaf children in the city in comparison with last year. However, there continues to be 24 children with severe impairment of hearing under our care. The increase in the numbers of partial hearing school and pre-school children, shown in Table IV, is quite significant and shows a very considerable improvement in case finding and treatment facilities in the city for deafness over the past six years.

We continue to be very appreciative of the provision available to children from Cardiff at the Glamorgan Nursery School for the Deaf at Whitchurch. Unfortunately, the new residential school for the deaf at Penarth has still not reached completion and this has meant the continued placement of some of our deaf children in residential schools at great distances away from their homes. One of our senior deaf boys attends the Mary Hare Grammar School for the Deaf and he is making exceptional academic progress. It is anticipated that he will do well in his 'O' level examinations.

CHILD GUIDANCE CLINIC

Report for the year ended 31st December, 1971

1.		Boys	Girls	Total
	Number of new cases referred	194	115	309
	Number of old cases carried forward ..	135	60	195
	Number of cases on waiting list	51	27	78

2. Sources of ascertainment of patients actually dealt with for the first time:

Parents or Guardians	46
Juvenile Courts	—
Probation Officers	5
Social Agencies	12
Schools	82
School Health Service	88
Private Medical Practitioners	39
Other sources	57
TOTAL	329

3. Problems for which patients dealt with for the first time were referred to the Clinic:

Nervous Disorders

Fears	18
Seclusiveness	10
Depression	9
Excitability	—
Apathy	—
Obsessions	3

Habit Disorders and Physical Symptoms

Speech disorders	7
Sleep	15
Movement	8
Feeding	5
Excretory	39
Nervous pains and paralysis	3
Fits, disorders	2

Behaviour Disorders

Unmanageable	102
Temper	25
Aggressiveness	28
Jealous	—
Demanding attention	3
Stealing	31
Lying and romancing	11
Truancy	60
Sex difficulty	7

Education and Vocational Difficulties

Backwardness	8
Inability to concentrate	—
Inability to keep jobs	—
Special disabilities	—

For Special Examination

Psychological examination	2
Educational advice	6
Vocational guidance	—
Court examination	—
Admission to Special (not M.D.) Residential Schools, etc.	—
Placement in Foster Homes	—
Adoption	—

4. Ages of patients dealt with for the first time:

Years ..	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Boys ..	—	3	4	13	14	23	20	18	21	14	16	16	18	16	9	1	206
Girls ..	—	—	—	4	11	12	5	9	14	10	5	10	13	17	8	4	123
TOTAL ..	—	3	4	17	25	35	25	27	35	24	21	26	31	33	17	5	329

5. Results of treatment and disposal of patients discharged:

Adjusted	39
Partially adjusted	44
Unadjusted	—
Advisory	85
Transferred to: S.H.S. 1; S.A.O. 4; Others 18	Total .. 23
Unsuitable for further treatment	—
Failed to co-operate	29
Withdrawn	34
Left school	13
Left Cardiff	13

6. Recommended for admission to Institutions	7
Admitted	5

7. Work of Sections:

	Exam.	Treatment	Parents Interviewed	Others Interviewed	School Visits	Home Visits	Totals
Psychiatric	240	627	371	31	—	—	1,269
Psychological . . .	160	23	54	1	265	—	503
Social	—	—	428	91	65	1,200	1,784
TOTALS	400	650	853	123	330	1,200	3,556

8. Conferences

(a) Staff 118

(b) Case 1,372

9. Visitors to Clinic 6

Other activities —

PRESSWOOD HOUSE DIAGNOSTIC UNIT

During the calendar year 1971, 26 children (15 boys, 11 girls) were admitted to Presswood House School, 1 of whom was re-admitted for a second period of assessment.

In the same period 22 children (13 boys, 9 girls) left the school, having had their difficulties diagnosed and having received special education. Thirteen of these children (8 boys, 5 girls) were transferred to Special Schools for educationally subnormal children or to Special Classes for slow learners in Ordinary Schools in the city. The remaining 9 children (5 boys, 4 girls) were transferred to Ty Gwyn Special School for the severely handicapped.

The 22 children who left Presswood House were diagnosed as suffering from the following handicaps:

- 1 child educationally subnormal, also has partial hearing, eye defect, speech defect and is physically handicapped.
- 1 child is educationally subnormal, also has speech defect and is physically handicapped. Maladjustment in relation to family.
- 1 child educationally subnormal, also has speech defect, eye defect and is maladjusted.
- 1 child educationally subnormal, also has speech defect, eye defect and minimal physical handicap.
- 1 child educationally subnormal, also has speech defect. Deprived home/social background.
- 1 child educationally subnormal, severe maladjustment and communication difficulties.
- 1 child educationally subnormal, maladjusted and speech defect.
- 2 children educationally subnormal and behaviour problems.
- 2 children educationally subnormal and deprived home/social background.
- 1 child educationally subnormal with speech defect.
- 1 child educationally subnormal.
- 1 child severely subnormal, no speech, physically handicapped and brain damage syndrome.
- 1 child severely subnormal, speech defect, maladjusted and deprived home/social background.
- 1 child severely subnormal, no speech, epileptic and brain damage syndrome.
- 1 child severely subnormal, severe speech defect, partial hearing and severe behavioural problems.
- 1 child severely subnormal, speech and eye defects and severe behavioural problems.
- 1 child severely subnormal, severe speech defect, enuretic and eye defect.
- 1 child severely subnormal and speech defect.
- 1 child severely subnormal and delayed speech.
- 1 child severely subnormal and maladjusted.

Duration of Stay

The length of stay varies from a few weeks to as long as two years. The average duration of stay among children who left in 1971 was 13 months. Some children are found to be clearly educable or uneducable within a relatively short space of time. However, certain children in a fairly narrow ability range (approximately I.Q. 50-55) stay for longer periods (not exceeding two years) as they present special problems of prognosis and diagnosis.

During the year, one severely emotionally disturbed child with near-average intelligence was admitted to receive short-time assessment, a special educational treatment, and to await suitable placing.

Source

Many children are admitted to Presswood House School before they reach the Junior School stage. Some come direct from their own homes, many of whom have been known to the Authorities since birth. There are other children who, attending Infants/Primary Schools, are detected by class teachers and head teachers as being in need of special education. A few arrive from Special Schools and from Ty Gwyn. The 26 children admitted in 1971 came from the following sources:

Sex	Home	Nursery School	Infants School	Junior Schools	Special School	Ty Gwyn	Total
Boys	2	1	7	1	—	4	15
Girls	2	—	6	3	—	—	11
TOTAL	4	1	13	4	—	4	26

Age of Admission in 1971

Usually children are aged 4 to 7 years on admission. In 1971, 3 four-year-olds, 10 five-year-olds, 6 seven-year-olds and 7 six-year-olds were admitted.

HISTORY OF THE DEVELOPMENT OF THE JUNIOR TRAINING CENTRE FOR MENTALLY HANDICAPPED CHILDREN IN CARDIFF

Abstract from a talk given by Miss D. M. Price, Principal Supervisor in Charge, Ty Gwyn Junior Training Centre to the Parent/Teacher Association at the Centre on 4th November, 1970

The first day centre for mentally handicapped children in Cardiff was started some 45 years ago in June 1925. The Medical Officer of Health at that time was Dr. R. M. F. Picken (later Professor Picken and Provost of the Welsh National School of Medicine). He had recognised the need for day care facilities for the mentally handicapped. Cardiff was the second place in the country to have a day-occupation centre. The first such centre had been started some time previously at Leeds. Mrs. Dascombe had applied for a post as a part-time teacher at an ordinary school and although unsuccessful in this application, she was requested by Dr. Picken to undertake the supervision of the first centre. Thus she came to this work quite by chance. It is pleasing to record that she is still alive and was present at the opening of the Ty Gwyn Junior Training Centre.

The premises occupied by the first centre were in Fitzalan Place. The house, a large gloomy Victorian building, could hardly have been less suitable for the purpose to which it was put. Initially 13 children (8 boys and 5 girls) attended, out of a total of 144 mentally handicapped children who were known to the health authority in the city and who were living at home at that time. The numbers attending increased gradually to 19 in 1926 and 27 in 1927 (by this time a total of 200 handicapped children were known to the health department).

At first the centre functioned on a part-time basis only and operated during the afternoons. Some time in 1927 it was decided that the centre should operate on a full-time basis. The motivation for this was in order to provide a mid-day meal for the children. At that time there was a great deal of poverty and many of the parents were unemployed. Five of the children attending had been diagnosed as suffering clinically from malnutrition, hence the desirability of the provision of a mid-day meal. It was also considered that the children should be trained in assisting with the preparation of meals. They helped with the preparation of vegetables, did the washing up, cleaned out the room and washed the towels, etc. The meal was not free – a charge of 1d. per day per child was made. This charge remained at 1d. until July 1970 when full current charges for lunches were introduced. In 1927 the sum of £1 was allowed the centre to provide mid-day meals for the whole week for 27 children and the staff (i.e. Mrs. Dascombe). This was later increased in 1930 to 25/- a week for the provision of all meals. An adequate two-course meal was provided for each child for this amount of money.

The activities of the children at the centre at that time bear a certain resemblance to present-day activities. There was quite a lot of handwork but rather more word-building. The level of handicap of the children then was not as great as that of the children now attending Ty Gwyn. Many of those who were excluded from school attendance at that time would now be included in special educational provision within the educational system.

The following extract is taken from a report on the work of the centre for 1928:

'This year we have had no cases of impetigo. This is an improvement on previous years when this infection was prevalent. The year has also shown a change in attitude of parents in their views on the centre and they are showing more readiness to co-operate in training the children in punctual habits. The children themselves are anxious to attend regularly. They are also kinder and less selfish in their attitude towards each other and respond more readily to the demands of their own community in the centre.'

In those days the children all had to be brought to the centre and collected by the parents themselves or some other responsible relative or friend. Normally the centre closed at 4 p.m. but one of my earliest recollections is of remaining on one occasion until 7 o'clock still waiting for a child to be collected. There was no telephone to provide contact with the outside world.

In 1929 it was recognised that the numbers and age range of children attending presented too great a task for one person. Miss Marjorie Price and Mr. J. P. Doran were appointed to assist Mrs. Dascombe and at this time the term 'Occupation and Training Centre' is first recorded as being used in Cardiff. There were 25 children attending all day and 8 boys over 16 years of age attended from 9.30 a.m. to 12.30 p.m. only. A further 13 girls over age of 16 years attended during the afternoons from 2 to 4.15 p.m. only.

The accommodation used until this time had been just one ground floor room in the house in Fitzalan Place. Two halls to the rear of the premises were then rented for use on a part-time basis only. These extend out and face on to Fitzalan Road. During evenings and week-ends they accommodated the meetings of a religious sect and consequently all equipment and apparatus had to be packed away at the end of the day. The toilet accommodation was primitive. The girls used the one indoor toilet in the house which was approached up a flight of stairs and was shared with quite a number of offices also accommodated in the house. The boys had to make do with a single outside toilet which leaked very badly in wet weather. The only washing facility, also used in the preparation of the meals, was one cold water tap and a large earthenware trough. Access to the outdoor toilet and halls at the rear of the building was particularly difficult during cold winter weather as there were frequently patches of ice on the yard. 'I can remember skating across that place on several occasions with the children's Christmas party food.' The only cooking facility was one small gas stove, used to prepare the mid-day meal as well as for teaching cookery. It is interesting to note that it was the boys who figured most prominently in helping to prepare the meals and clean the vegetables. Their remaining activities were very

much as today, woodwork and metalwork, but in addition they had one great activity. This was shoe repairing. In those days the repairing of boots and shoes was a very important activity due to the harsh financial conditions prevailing and the high rate of unemployment. Our children were able to have their shoes repaired for the cost of the leather only and this was a significant contribution to their family budgets. The girls' training was very largely aimed at enabling them to be employed in domestic work and also to be more helpful at home.

The caretakers of the house in Fitzalan Place were two ladies, a Mrs. and a Miss Hughes, who were most helpful in assisting us in our work and were very fastidious in keeping the whole premises clean and tidy.

It was in 1930 that our first Christmas play was performed and it will be noted that the 1970 Christmas play is, therefore, the fortieth consecutive performance.

In 1931 Miss Freda Stevens was appointed as a guide to bring four children from Ely to the centre. This involved taking a bus to Victoria Park from Ely and then changing to a tramcar which conveyed them to Newport Road. She was our first bus guide. In a few years she was gradually absorbed into the work of the centre as a general assistant and the bus guiding duties also increased. All the boys and girls attending the training centre part of our establishments were of a sufficiently high calibre to be able to travel alone and this was a stipulation of their admission. Only the children in the occupation part of the centre were accompanied by the guide when travelling. All the children were issued at this time with pre-paid tram and bus tickets which were given out daily and this proved to be quite a considerable task.

In 1932 we started a 'thrift club' at the centre. This continued for many years and was eventually merged into the National Savings movement, which continued until we occupied our premises at Ty Gwyn.

In December 1933 Dr. Greenwood Wilson succeeded Dr. Picken as Medical Officer of Health.

I started work at the centre on 25th February, 1935. I have a vivid recollection of my first visit which was before my actual appointment. Three boys were busily occupied preparing vegetables in the room in Fitzalan Place. They are still about in the city today and I see them sometimes. They have all succeeded in obtaining lucrative employment and making a success of their work. They are now married and have families of their own. Again this emphasises the fact that the level of handicap catered for at the centre in those days was of far lesser severity than that for which we cater today.

My work consisted in caring for 21 girls from the occupation centre part of the establishment during the morning. In the afternoons I cared for the training centre girls. In addition to this, I supervised the preparation of the midday meal. I continued to do this for 21 years until 1956. The girls I taught were capable of very fine needlework and almost each one was able under supervision to make her own clothes. These were days of great unemployment and without doubt those girls in a present day situation would all have been capable of undertaking remunerative employment. I treasure many fine examples I have in my possession of their skill at needlework.

In May 1935 the Silver Jubilee of King George V was celebrated and one of the festivities was a display at Cardiff Arms Park before the Prince of Wales, later King Edward VIII. Seats had been provided for the children and we walked in a 'crocodile' from Fitzalan Place to the Cardiff Arms Park along an empty Queen Street which had been closed to traffic and we almost felt as if we were part of the official procession.

Throughout the 1930's a continuous search was made for more suitable permanent premises. Eventually land was acquired at Pengam largely due to the efforts of Councillor Tom Mullins, who was Chairman of the Health Committee. The estimated cost of the new building was £4,000. Furniture and equipment were to cost £300 and an allowance of £430 p.a. for transport was made.

Until the passing of the Mental Health Act in 1959 we were inspected annually by an Inspector of the Board of Control and a report was always provided. The designing of our new building at Pengam was the task of the architects attached to the Board of Control.

As we had occupied three rooms at our old premises they provided a building with just three rooms plus a toilet at each end, one for boys and the other for girls. Two small rooms were also built at either end. It was intended one should be furnished as a sitting room and one as a bedroom. This was never accomplished. The three main rooms were a domestic science kitchen and woodwork room on the other side of a long corridor with the occupation centre room on the whole of the other side of the corridor. There was no staff accommodation. The whole concept was drab and unimaginative. We had hoped for so much from our new accommodation and were rather disappointed in it, but worse was to follow. The Pengam Centre was completed by October 1939. Unfortunately World War II broke out in September 1939 and our new building was commandeered for war purposes.

It was used at first to accommodate Belgian refugees and then it was used by the Ambulance Service. When eventually it was handed over to us it had been well used and there had been quite a lot of bomb damage.

My memories of the Centre during the war were rather hazy. I recollect we had a cellar in a house in Fitzalan Road reinforced and strengthened for use as an air-raid shelter. Here we retired with games and books to amuse the children but sometimes during very long air-raid alerts it became rather monotonous and the children became very tired and fretful. Many times we were very late going home at night due to these prolonged air-raid alerts.

During 1940 the training centre first became full-time for the children of 16 years and over. Until then the boys continued to attend mornings only and the girls in the afternoon. Food rationing was the main reason for the change. Limited food at home was supplemented by providing them all with a mid-day meal. Shortly afterwards we acquired our first transport. We shared a bus with the Greenhill Open Air School for the Physically Handicapped and the Gabalfa Special E.S.N. School. Miss Nunan first joined the staff to replace Miss Stevens as a guide on the bus in 1941.

Eventually we moved into the Pengam Building in 1946. We had two days holiday to complete the move and because of the post-war restrictions there was no new furniture or equipment. Everything was second-hand and many relics from this time continue to be in use at Pengam even today. Our greatest acquisition at Pengam was that at last we had a telephone. It was not installed for us but had been left by the ambulance people and it was not without a struggle that we managed to keep it installed. The authorities seemed to think it would be misused and that we should persistently make a nuisance of ourselves in calling them.

From 1946 also we had a school bus to ourselves. It had a very long run from Pengam to Splott, City Road, North Road and over to Canton and out to Ely. Fortunately traffic conditions were not bad in those days.

By 1947 we had 79 children and a staff of 5 together with a part-time cleaner. No children under seven years were admitted to the centre or to any special school in the city until this time. Then we gradually admitted a few younger infants. In 1950 it was decided to open a nursery group. This involved the erection of a new building in the playground at Pengam for use as a woodwork room. The old woodwork room and stores being converted into the nursery and bathroom and toilets. Miss G. Watkins came in 1957 to be in charge of the group. The children ranged in age upwards from two years and toilet training and feeding became the most important part of the work within the group.

In 1953 Dr. Wm. Powell Phillips succeeded as Medical Officer of Health and continued until September 1970. He had been Deputy Medical Officer of Health since 1933 and Dr. C. W. Anderson was appointed as his deputy. His son Dr. D. J. Anderson is our present Medical Officer of Health and will be the last of the succession of heads of the Health Department concerned with administering this centre as it is being made the responsibility of the Education Department from 1st April, 1971.

During the mid 1950's it was realised that our accommodation was too small. We had by 1955 some 139 children attending and over-crowding was gross. Additional accommodation was opened at Preswylfa House, Canton, in June 1956. This catered for the children under 16 years from the south-west and north of the city. Pengam catered for all the

remainder. By then we had three buses and an ambulance transporting the children. In 1956 the Parents' Association which eventually merged into the National Association for the Mentally Handicapped was formed. They organised their first short stay home at Preswylfa during that summer holiday that year. Quite a number of children from the Glamorgan Authority area now began to attend our two centres. In 1957 there were 24 at Pengam and 16 at Preswylfa from the county.

The provision of proper school meals started in 1956 and the children were no longer concerned with their preparation.

At this time too the various psychometric and other testing and assessment procedures on handicapped children on admission to the centres became much more highly developed. Many trials of new drugs thought to be of benefit to the mentally handicapped were undertaken. From 1957 the urine tests for Phenylketonuria were started.

In 1959 Dr. C. W. Anderson organised a course of in-service training for the staff of training centres. This continued in being for ten years and attracted people from all over South Wales and Monmouthshire. They attended one day a week throughout an academic year. Courses of training for teachers of the mentally handicapped started with a one year course in London in 1935/36. This slowly evolved into the present two year training course which can be taken at several centres including the College of Commerce in Colchester Avenue, Cardiff. Most of our staff now have attended these courses and are highly skilled in caring for and teaching the mentally handicapped child. We now also have nursery assistants for work with the younger children who are all N.N.E.B. Certificate holders.

Amongst the other people who have been closely connected with the Centre is Mr. W. Sweetland, who worked in the Health Department for many years and was a pillar of strength to us and provided great support. He moved away to Surrey in 1961. Dr. N. K. Gibbs, Senior Medical Officer, was most closely attached to the work of the Centre until her retirement in 1962. Miss K. Powell was our much loved health visitor associated with us from the inception of the work until 1949 when she retired. Mrs. L. Phillips succeeded her between 1949 and 1959 and Miss N. Buck, our present health visitor, took over at that time. She now deals only with children up to the age of seven years and her colleague, Mrs. Thomas, cares for those over this age.

By the late 1950's our numbers had grown to such an extent that another move in accommodation was contemplated. This took a long time. A site was obtained in 1961 in the grounds of Penylan Court, but a further six years were to elapse before the building was completed.

Meanwhile in 1962 two modern units were opened in the grounds of Preswylfa House. One a nursery unit and the other our first Special Care Unit for very severely handicapped children.

Following the recommendations of the Mental Health Act 1959, the Local Authority was faced with the necessity of providing a more comprehensive community care service than it had previously. Hostels, residential training centres, workshops, social clubs, clinics, and a more intensive home visiting service formed part of the new scheme.

With the building of a new access road to the docks, the established training centre was adversely affected and it became necessary to build a new training centre for juniors. It had been recommended that Junior Centres should be entirely separated from Adult Centres and this new arrangement was, therefore, ideal.

It was later decided that Pengam Centre would be used for industrial training and workshops.

Arising from this Act, Local Health Authorities were requested to provide residential accommodation wherever the alternative would be hospital admission or inability to provide the advantages of training at all. A hostel, on the same site as the Training Centre was, therefore, the answer to this problem, and it was envisaged that it could be used to provide short-term care for children in order to give temporary relief to parents under stress.

The hostel was planned as the first in the development programme of the Cardiff Health Committee and the Training Centre replaces the junior section of the present Pengam

Occupation and Training Centre, and the groups accommodated at Preswylfa Training Centre have been transferred here.

This new Hostel and Training Centre is situated on a site of approximately 3-4 acres in one of the most attractive areas of Cardiff.

The Training Centre, which is separate from the Hostel, provides accommodation for 130 children and includes a nursery, special care unit for multi-handicapped children, and a training centre for mixed sexes up to 16 years of age. A domestic workroom, demonstration flat and handicraft rooms have been provided for the senior pupils, and provision has been made for a small hydrotherapy bath.

The building has been designed on a courtyard system, and three sheltered and secluded play areas are accessible from the inside of the building. Two external paved playgrounds and a covered playshed have also been included in the design.

The Hostel, which is the first purpose-built building of its kind to be provided by the Local Health Authority, will accommodate 21 women residents, for whom recreational facilities have been provided. There is also a short-stay home for twelve children who can be accommodated when difficulties arise in their homes, and when it becomes necessary to provide temporary relief for their parents.

In order to prevent the children from accidentally burning themselves, central heating from oil-fired boilers and convector type radiators have been generally used.

The buildings, with the two houses situated near the main entrance, were completed in May 1967 at a cost of £187,000 by the Davies Construction Company Limited.

The work of the Health Committee in the field of Mental Health is made considerably easier by the co-operation of voluntary and religious bodies in the city, and lastly by those very important members of the community, the parents of these children for whom the centre has been built.

V—NURSERY SCHOOLS AND CLASSES

Nursery Schools and Classes

There are nine Nursery Schools and two Nursery Classes in the city, situated as follows:—

Nursery Schools:	1.	CANTON	..	..	Severn Road
	2.	GRANGETOWN	..	..	Ferry Road
	3.	SPLOTT	..	..	Moorland Road
	4.	ELY	..	..	Vachell Road
	5.	SPLOTT (Tremorfa)	..		Baden Powell School
	6.	ELY	..	..	Hywel Dda School
	7.	SOUTH (Docks)	..		West Close, Bute Street
	8.	RUMNEY	..	..	Rumney School
	9.	ELY PLAY CENTRE	..		Archer Road
Nursery Classes:	1.	NINIAN PARK	..	..	Ninian Park School
	2.	ADAMSDOWN	..	..	Tredegarville C/W School

Accommodation is provided at the Nursery Schools for a total of 147 full-time and 716 part-time children aged 3–5 years. At the Nursery Classes 13 children aged 3–5 years are accommodated full-time and 179 children part-time.

Health visitors pay a visit to each Nursery School and Class at least once in each week and very often at more frequent intervals as such visits become necessary. A Medical Officer visits the Nursery Schools and Classes at intervals of approximately one month for the purpose of medically inspecting new entrants and of reviewing the health of pupils.

VI—MISCELLANEOUS

INFECTIOUS DISEASES

The number of school children ascertained to be suffering from infectious diseases during the year were as follows:—

Scarlet Fever	..	..	..	..	..	14
Whooping Cough	..	..	..	..	..	27
Diphtheria	..	..	..	..	..	—
Measles	..	..	..	..	..	186
Acute Pneumonia	..	..	..	..	..	—
Meningococcal Infection	..	..	..	..	..	—
Paralytic Poliomyelitis	..	..	..	..	..	—
Non-Paralytic Poliomyelitis	..	..	..	..	..	—
Acute Encephalitis – Infective	..	..	..	..	..	—
Dysentery	..	..	..	..	..	7
Para-Typhoid Fever	..	..	..	..	..	—
Enteric or Typhoid Fever	..	..	..	..	..	—
Erysipelas	..	..	..	..	..	—
Food Poisoning	..	..	..	..	..	16
Tuberculosis – Respiratory	..	..	..	..	..	5
Acute Meningitis	..	..	..	..	..	11
Hepatitis	..	..	..	..	..	94

In addition the following children were notified by Head Teachers as absent from school due to the diseases stated:—

Rubella	..	..	..	..	..	104
Mumps	..	..	..	..	..	42
Jaundice	..	..	..	..	..	5

PROVISION OF MEALS AND MILK

Central kitchens are in operation at Tremorfa, Canton and Fairwater and provide approximately 3,300 meals per day for consumption at 40 schools.

Self-contained kitchens are situated at 81 schools and 3 nurseries. These provide midday meals for an average of 18,000 pupils. Central kitchens and self-contained kitchens provide an average of 21,300 pupil meals per day.

The number of children attending primary, high, special and nursery schools, provided with dinners and/or milk during the first and last complete weeks of 1971 were as follows:—

	<i>First Complete week, 1971</i>	<i>Last Complete week, 1971</i>
Average number of necessitous children provided with dinner daily free	6,787	8,185
Average number of children provided with milk daily free	26,851	11,892
Average number of children provided with dinner daily on payment	15,588	11,716

MEDICAL EXAMINATIONS OF TEACHERS AND ENTRANTS TO COURSES OF TRAINING FOR TEACHING AND TO THE TEACHING PROFESSION

The School Medical Officer is an examining medical officer for the Education Committee in respect of the entry of teachers into the superannuation scheme. During the year 182 teachers were examined for this purpose.

From 1st April, 1952, the Minister of Education instituted new arrangements for medical examinations for entrants to the teaching profession and for candidates applying for entry to training colleges, university departments of education and approved art schools (Circular 249, 28th March, 1952).

The school Medical Officer has the duty of examining candidates applying for admission to training colleges and entrants to the teaching profession except those intending to enter the teaching profession on completion of an approved course of training, in which case they are examined as at present by the College Medical Officer. The school Medical Officer has to fulfil this last obligation in respect of students completing courses at the Cardiff College of Art as he acts as the College Medical Officer.

As a result of these requirements, 271 candidates and entrants were medically examined.

The Minister also directed that X-ray examinations shall be an essential part of the medical examination on entry to the teaching profession (Circular 3, 28th January, 1969).

Accidents to Pupils

Head Teachers are requested to provide details of all accidents occurring to pupils on school premises or arising out of school activities. During 1971, 758 such reports were made.

DESCRIPTION OF REGULAR CLINICS

	Minor Ailments	Cleansing	Ophthalmic	E.N.T.	School Dental Service	Speech Therapy	Enuresis
(a) Public Health Clinics available for School children							
Gabalfa Clinic, 213 North Road ..	Yes	—	Yes	Yes	Yes	Yes	—
College Farm Clinic, Llanidloes Road ..	Yes	—	Yes	Yes	Yes	—	—
Grangetown Clinic, Cambridge Street ..	Yes	—	Yes	Yes	Yes	Yes	—
Canton Clinic, Wessex Street ..	Yes	—	Yes	Yes	Yes	—	Yes
Fairwater Clinic, Plasmawr Road ..	Yes	—	Yes	Yes	Yes	—	—
Ely Clinic, Redhouse Crescent ..	Yes	Yes	Yes	Yes	Yes	—	—
Llanishen Clinic, Newborough Avenue ..	Yes	—	Yes	Yes	Yes	—	—
Treatment Centre, 1 Curran Road ..	—	Yes	—	—	—	—	—
Llanrumney Clinic, Llanrumney Avenue ..	Yes	—	Yes	Yes	Yes	Yes	Yes
Roath Clinic, Roath Court Road ..	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Splott Park Clinic, South Park Road ..	Yes	Yes	Yes	Yes	Yes	—	—
Rhiwbina Clinic, Groes Lon ..	Yes	—	Yes	Yes	Yes	Yes	—
Whitchurch Clinic, Bishops Road ..	Yes	—	Yes	Yes	Yes	Yes	—
(b) Health Centres where School Clinics are held:							
Butetown Health Centre, Loudoun Square ..	Yes	—	Yes	Yes	Yes	—	—
Trowbridge Health Centre, Abergele Road ..	Yes	—	Yes	Yes	—	—	—
Llanedeyrn Health Centre ..	—	—	—	—	—	—	—

N.B. Speech Therapy Sessions are also held at Pen-yr-Bryn, Greenway and Trowbridge Infants' Schools, Glan-yr-Afon Junior School, St. John Lloyd School, Pen-yr-Heol Special Class, Presswood House and Llanishen Court Special School.

VII—STUDENT HEALTH SERVICE

IN THE

COLLEGES OF FURTHER EDUCATION

Report by Dr. G. F. NEWBOLD, M.B., B.S.(Lond.), M.R.C.S., L.R.C.P.,
M.M.S.A., D.R.C.O.G., D.C.H., F.R.S.H.

Administration

Since I took over the Student Health Service in September 1965, the use made of it in all the colleges by students and, in certain circumstances, by staff, has increased out of all recognition. This, naturally, is highly gratifying to us, for it reflects a confidence which I trust is not misplaced and is also a significant pointer to a basic need in all of our colleges and universities throughout the land. During the year (1970–71) the official allocation of time spent in the colleges was six sessions (three days weekly). This we have found to be inadequate to our present requirements and it is my hope that it may be possible to allocate an extra regular weekly session to the Service. In addition to these official six sessions I have, as in previous years, made numerous extra visits to the colleges and also undertaken evening sessions at least once, and sometimes twice, each week throughout the year. I again made occasional domiciliary emergency visits to sick students who were not registered with a local general practitioner.

The amount of secretarial work involved has at times proved a real problem – as this has tended to increase *pari passu* with our clinical duties. It is shared by the College Health Visitor, Mrs. M. P. Davies, S.R.N., H.V. and myself and, although we are once again grateful for help received from other sources when possible, it is difficult to see how any regular secretarial assistance is practicable, as the Service is not a centralised one and involves a good deal of travelling among all the colleges concerned.

The practice was continued of getting all students to complete a confidential medical questionnaire at the beginning of the new academic year. As a result of the information disclosed therein students were seen on a selective basis, although certain groups were examined as a routine on entry or as soon thereafter as possible. These included the Bakery and Catering students, those from overseas and the Nursery Nurses.

In the Michaelmas Term I had consultations with the city Architect's Department concerning the planning and equipping of the medical quarters in the new College of Music and Drama and the new extension to the Llandaff College of Technology.

Psychosomatic Illness

Once again I feel obliged to devote a separate section to this type of illness because of its frequency and importance. Symptomatology was very varied and included abdominal pain, disturbance of bowel function, skin disorders, alopecia, muscle and joint pain, migraine and other forms of tension – headache, general fatigue and lassitude, asthma, obesity and loss of weight, and a variety of gynaecological complaints, etc. Sometimes an obvious anxiety and/or depression was concurrently present, although this was not invariably so. A number of students also consulted us because of psychosexual problems which were of sufficient gravity to cause considerable anxiety and interference with their studies. Two, one male and one female, came for help because of strong homosexual tendencies.

Many patients suffering from psychosomatic disorders required careful investigation before a definite diagnosis could be made – although their psychogenic origin may have been suspected from the first. One girl, for instance, was seen with symptoms highly suggestive of an acute intra-abdominal lesion which was thought to be a possible torsion of an ovary and she was sent as such to the hospital gynaecological department. After full investigation no organic disease was discovered and her symptoms were later thought to result from underlying psychological causes – although this was not at all obvious.

Indeed, throughout the year in all the colleges, attacks of abdominal pains or discomfort were not uncommon in students of both sexes as a psychosomatic reaction. On the other hand, two cases of abdominal pain with unusual symptoms which could easily have been attributed to psychogenic factors were found to have ovarian cysts – one of which had already ruptured and given rise to a local peritonitis. Both were referred to hospital and in both an ovariectomy was performed.

One particular type of psychosomatic disturbance which requires special mention because of the number of cases seen during the year is that of 'obesity'. Some of the students were not obviously overweight but all complained of over-eating and an increase in weight since coming to college. The students who were most concerned were those whose future careers involved personal appearances before the general public, e.g. as actresses, models, etc. Under those circumstances it was considered justifiable and appropriate to supply such individuals with anorectic drugs for short periods on a temporary basis, if the over-eating could not be controlled unaided. In my experience the use of placebos had little or no effect – unless their administration was accompanied by strong psychological suggestion as well. If these students were not helped a number of them tended to become depressed, lost interest in their work and began to eat more than ever – so that a vicious circle was established.

Among other miscellaneous abdominal disorders in this category were cases of recurring psychogenic nausea and vomiting and a case of severe dysphagia which closely simulated a hiatus hernia and which was investigated as such in hospital.

Three students with alopecia areata and a number of others with various skin disorders were seen. In all of these the complaint was either due to, or made worse by, emotional tension and anxiety.

Tension headaches, apart from typical migraine, and joint and muscle pains, were not uncommon, and 'fainting attacks' with or without loss of consciousness, were seen from time to time in all the colleges. Occasionally, if there was reason to suspect an underlying 'organic' cause such as epilepsy, hospital investigation was called for. In all such cases referred, however, no 'organic' lesion was found and the E.E.G. and E.C.G. always showed no abnormality.

Treatment

Basically, this consisted of reassurance, combined when necessary with the short-term use of sedatives and tranquillisers. Many of the patients suffering from psychosomatic disorders needed to be seen on a number of occasions, whatever the form of therapy decided upon. Three, who were almost totally unresponsive to treatment by drugs or attempts at reassurance on a conscious level, were given a course of hypnotherapy. Two of these were markedly improved by this method. The third, unfortunately, proved to be completely refractory. Lack of time largely prevented hypnotic techniques being used in other suitable cases as several sessions per patient were required. None of those so treated were selected on any suggestibility basis; the only criterion was the extent of their disability and the fact that other forms of treatment had previously been tried and failed to effect any amelioration of the patients' symptoms. Three cases of secondary amenorrhoea lasting two years or more and who had failed to respond to hormonotherapy after full investigation in hospital, were considered for hypnotherapy. This was deferred, however, partly because of pressure of other work and partly because the students concerned were not so anxious about the condition that their health or work was affected thereby.

Psychological Disorders

I have classified these separately from the preceding since the symptoms here were predominantly psychological and with the somatic component assuming a role of minor importance so far as the patient was concerned. The most frequent complaint for which we were consulted was depression – often associated with anxiety as well. Physical tiredness and general fatigue and inertia not infrequently occurred in this group. In three cases the depth of depression was sufficiently great to warrant referral to hospital.

One interesting case of an 'out-of-the-body' experience is worth recording. This phenomenon, sometimes referred to as 'astral projection' can occur in perfectly normal persons; indeed it is said to have happened to Oliver Cromwell on the eve of the battle of Worcester. Because of the alarming nature of the experience, however, the student concerned was referred to the hospital psychiatric department.

Although many of the patients suffering from depression or anxiety complained that the work connected with their studies was largely responsible for their symptoms, closer investigation showed that this was not really so in the majority of cases. Other factors such as domestic discord at home, disturbed relationships with a girl or boy-friend, homesickness and unsatisfactory lodgings, were usually of greater importance in the aetiology of a neurotic breakdown. Although patients suffering from psychosomatic and psychological disorders tend to place a considerable strain on the time and resources of the physician there is little doubt that the interest and patience of the latter will ultimately be rewarded. That this is so has been amply demonstrated by those doctors who practise 'La medecine de la personne', a movement initiated by the distinguished Swiss psychiatrist, Paul Tournier and others, just after the Second World War and which has now achieved world-wide recognition.

Miscellaneous Cases of Interest

One case of pulmonary tuberculosis occurred and was admitted to Sully Hospital. Contacts were followed up by the Chest Clinic in Cathedral Road.

Four cases of venereal disease (two male and two female) were seen and were referred to the Special Clinic at the Cardiff Royal Infirmary for treatment. A number of students complained of leucorrhoea but no other instance of venereal infection was discovered – the majority of these being due to a non-specific infection or to *Candida albicans*.

One student, while sitting in a lecture, was suddenly seized with an attack of generalised muscle spasms, clinically resembling tetany. No cause was discovered for this attack and she made a complete recovery.

In all the colleges there was the usual seasonal high incidence of respiratory diseases – mainly tonsillitis, pharyngitis, laryngitis and colds. Sinusitis and bronchitis also occurred, as well as cases of an influenza-type illness.

Two cases of illicit drug-taking came to my notice during the year, both of which involved the use of cannabis resin.

A number of students consulted us because of urinary disorders. The great majority of these were acute cystitis or psycho-cystitis, and in one instance the onset was sudden and heralded by collapse with unconsciousness. If an individual suffered from recurring attacks she was referred to hospital for further investigation – unless this had already been done prior to coming to college.

At the College of Food Technology and Commerce a minor outbreak of an irritating skin eruption occurred. Following a visit to the college by a consultant dermatologist the trouble was found to be an acute allergy due to tick bites. After appropriate measures were taken the outbreak subsided satisfactorily.

Throughout the year we were called upon to treat and advise on casualties and accidents in all the colleges. A number of cases of fractures, mainly involving the ankle and small bones of the foot were encountered. Injuries to the back, usually muscular, were not uncommon and cuts and minor burns were fairly frequent.

Administration

This was more or less on the same lines as the previous year – six regular sessions weekly being devoted to the service. In Table IV the 'complaints' continue to be classified under the heading of the most prominent symptom – even though many of them are caused by psychological or emotional factors and are, therefore, strictly speaking 'psychosomatic'.

TABLE I

	Llandaff College of Technology	College of Food Technology and Commerce	Welsh College of Music and Drama	College of Art	Rumney Technical College
Number of Full-Time Students	370	804	133	335	220
Number of Full-Time First Year Students ..	200	415	68	102	27
Number of Part-Time Day Students ..	2,343	1,421	696	28	1,317

From 1st September, 1971 certain courses from the College of Food Technology and Commerce were transferred to Rumney Technical College. The figures given in the above table are those before the change-over was made.

TABLE II

(Showing Number of 'Complaints' per Student)

	1	2	3	4	5+
Llandaff College of Technology	251	46	12	—	1
College of Food Technology and Commerce	652	357	264	114	211
Welsh College of Music and Drama ..	91	63	75	66	21
College of Art	170	138	44	26	—
Rumney Technical College	145	11	3	3	—

TABLE III

(Showing Number of Consultations per 'Complaint')

	1	2	3	4	5+
Llandaff College of Technology	256	38	9	5	1
College of Food Technology and Commerce	1,140	270	98	45	56
Welsh College of Music and Drama ..	218	51	19	19	10
College of Art	261	60	22	31	6
Rumney Technical College	125	11	—	—	—

TABLE IV

(Showing Classification of "Complaints" for which the Department was Consulted.)

	Llandaff College of Technology	College of Food Tech- nology and Commerce	Welsh College of Music and Drama	College of Art	Rumney Technical College
Cardiovascular disease (includ- ing anaemia and history of rheumatic fever)	10	41	5	12	3
Chest (including tuberculosis)	24	78	13	13	16
Musculo-skeletal (including accidents)	65	223	34	30	39
Psychological and emotional (including C.N.S.)	8	149	62	36	12
Eyes (mainly defective vision)	33	60	15	23	14
Gastro-intestinal	28	125	19	32	20
Genito-urinary	38	305	85	60	4
Ear, Nose and Throat	47	249	45	35	26
Skin	27	172	32	42	19
Miscellaneous (including allergies, endocrine, vaccination, immunisation, blood tests, routine medicals and dental)	88	328	46	128 (This includes 71 medical exams of prospective teachers for the Depart- ment of Education and Science)	56

ENVIRONMENTAL HEALTH SERVICE

REPORT FOR 1971

of W. BATE, M.B.E., M.A., D.P.A., F.R.S.H., F.A.P.H.I.

Once again the familiar pattern of this report shows little change from that of previous years since it is largely governed by the need to satisfy the different requirements of government departments, the Health Committee of the Council, other workers in the same or allied fields and the general reader.

The nature of the work is such that one is rarely able to report any startling or even noticeable changes within the short-term; the maintenance and improvement of environmental standards inevitably depends largely on the assiduous discharge of routine tasks.

For the first time in a number of years the department's establishment of public health inspectors almost reached full strength, although it is too much to hope that this happy situation will continue, and as a result I am pleased to report that the slum clearance target was more than attained.

At the same time a Cardiff House Condition survey was embarked upon which was well on the way to completion by the end of the year. On completion it is hoped, in early 1972, more than 9,000 houses will have been inspected and the survey will be the source of useful information to all the Council departments concerned with the improvement of living standards in the city.

The department's activities in the field of noise control have been extended; complaints have again increased in number, and traffic and other noise level surveys were undertaken. Investigation of complaints has now been placed upon a scientific basis since the department has been able to purchase a full range of sophisticated equipment which will fit the officers concerned to deal with virtually any problems which are likely to confront them.

It is disappointing to report that fewer food hygiene inspections were made during the year, but the improved staffing position permitted the appointment of a specialist food hygiene inspector; this should result in a raising of the standard of catering establishments in the city.

The work of the public health inspector is closely related to that of other officers of the City Council, and I have to thank those who have co-operated in providing relevant information. The various matters covered in the following pages include:

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STAFF

There were an unusual number of staff changes this year, and the department nearly reached a full complement of public health inspectors for the first time in ten years; there being one vacancy only at the end of the year.

Three pupils, Messrs. C. D. Tranter, J. D. Rolfs and P. Hutchings qualified during the year, and all were appointed as district inspectors. Two newly-qualified inspectors, Mr. D. B. Dobbs and Mr. H. Lewis, ex-pupils of Pontypool U.D.C. and Swansea C.B.C., were also appointed as district inspectors. Messrs. A. T. Arthur, A. M. Garratt and M. Murphy were appointed in September as pupil public health inspectors.

Mr. J. Moore, Re-housing Inspector, resigned to take up a post with Llanelli R.D.C., and Mr. Walford Davies was transferred from district work in his place. Mr. W. Barraby re-joined the staff as a part-time public health inspector, after retirement, but resigned shortly after following his election as a Cardiff City councillor. Mr. A. Lloyd, formerly with Redruth U.D.C., was appointed in September as a specialist public health inspector in Food Hygiene, and Mr. P. Thomas, from the Royal Borough of Kensington & Chelsea was appointed in January as a specialist public health inspector (Housing).

On the clerical side there were also numerous changes. Mr. A. Cosh retired after thirty-one years, and was replaced by Mr. J. D. Barnes; a sad occurrence was the unexpected death of Mrs. De Gietelink after a short illness, and Mrs. V. Thomas was transferred to re-housing following the resignation of Mrs. E. Rudd; Mrs. G. Roach also resigned. The resultant vacancies were filled by Miss J. Jones, Miss H. Grainger and Miss A. Lewis.

HOUSING

Some concern was expressed in the Annual Report for 1970 whether the pace in the clearance of unfit houses could be maintained during 1971 without additional staff. In the event, with the appointment of two additional public health inspectors, the target of 400 houses to be represented for clearance during the year has been more than attained: other work has been expanded and additional work undertaken. The total number of housing visits and revisits made during the year amounted to 6,744.

House Condition Survey

In collaboration with the City Planning Officer, a House Condition Survey was begun in March 1971. The survey is broadly similar to the National House Condition Survey made in 1967, and the Welsh House Condition Survey made in 1968. Its purpose is to obtain data on the structural condition of the housing stock in the private sector within the city with regard to the provision of basic amenities, the need for repair and the number of unfit houses. It is hoped that the survey will be completed during 1972 when more than 9,000 houses will have been inspected by members of the staff.

Clearance Areas and Compulsory Purchase Order Areas

The following Compulsory Purchase Orders, arising from Clearance Areas previously represented, were confirmed (with modifications) during the year:

Compulsory Purchase Order	No. of Houses	Date of C.P.O.	Date of Confirmation of C.P.O.
Riverside Areas No's 7-26	255	25th March 1970	24th March 1971
North Road Areas No's 1-2	7	8th Dec 1970	5th May 1971
Canton Area No. 2	14	10th Dec 1970	25th Nov 1971
Canton Areas No's 3-4	56	28th Jan 1971	20th Oct 1971
Bute-town Areas No's 20-25	243	23rd Dec 1970	9th Dec 1971

When confirming these Compulsory Purchase Orders the Secretary of State directed the Council to make well-maintained payments, and partially well-maintained payments, in respect of certain houses within the areas in the amounts stated below:

Compulsory Purchase Order	Well-maintained payments	Partially Well-maintained payments	Amount of payment £
Riverside Areas No's 7-26	59	26	11,720
North Road Areas No's 1-2	1	—	192
Canton Area No. 2	3	2	616
Canton Areas No's 3-4	4	—	560
Bute-town Areas No's 20-25	46	16	7,402

Adamsdown (Areas 16-17) Compulsory Purchase Order 1971

A public local inquiry into the making of this Order was held on the 7th September. The Secretary of State has not yet made known the outcome of the application for confirmation of the Order.

Canton (Area No. 5) Compulsory Purchase Order 1971

A public local inquiry into the making of this Order was to have been held on the 14th December. The Inspector who was to have conducted the inquiry was unfortunately taken ill on arrival in Cardiff. Consequently the public local inquiry was postponed. The re-arranged date for the inquiry has not yet been made known.

During the year, housing inspections were carried out in the Nora Street, Helen Street area of Adamsdown and the area south of Walker Road in Splott, both of which areas are included in the Council's provisional slum clearance programme. Both areas have been represented to the Health Committee who resolved that the areas be declared Clearance Areas. Compulsory Purchase Orders for these two areas have not yet been made:

Proposed Compulsory Purchase Order	Date of Representation	No. of Houses	No. of Families	No. of Persons
Adamsdown Area No. 18	18th March	125	142	429
Splott Area No. 6	26th Nov.	590	587	1,776

Individual Unfit Houses

During the year 29 houses regarded as being unfit for human habitation were dealt with individually as shown below:

Housing Acts 1957 to 1969	No. of houses	Displacements	
		Families	Persons
Unfit houses made subject to Closing Orders	11	12	37
Unfit houses made subject to voluntary undertakings to close	6	6	12
Unfit houses made subject to voluntary undertakings to demolish	12	14	45
Closing Orders determined	1	—	—
TOTALS	30	32	94

Closing Orders

15 Bridgend Street	49 Swansea Street
68 Llanelly Street	70 Llanelly Street
43 Wimborne Street	57 Wimborne Street
1 Glamorgan Street	R/O 270 Newport Road
1 Bridgend Street	26 Caerphilly Street
26 Rolls Street	

Undertakings to Close

33 Wellington Street	13 Wellington Street
79 Newport Road	136 Portmanmoor Road
71 Wellington Street	49 Gray Street

Undertakings to Demolish

37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59 Nora Street.

Closing Order Determined

47 Dalton Street (Part).

Housing Act 1964, Section 19**IMPROVEMENT OF DWELLINGS OUTSIDE IMPROVEMENT AREAS**

Seven representations were made by tenants with a view to the exercise by the Council of their powers to secure the improvement of the dwellings. The person having control of the dwellings was notified of the representation in each case. Three Preliminary Notices and three Immediate Improvement Notices were served under the provisions of this section of the Act.

Housing Act 1969, Part III**RENT OF DWELLINGS IN GOOD REPAIR AND PROVIDED WITH STANDARD AMENITIES****Section 45, Qualification Certificates**

Applications received	..	..	171
Applications granted	..	..	107
Applications refused	..	..	34

Section 46, Certificates of Provisional Approval

Applications received	..	..	25
Applications granted	..	..	17
Applications refused	..	..	1

Demolitions

From areas previously made subject to Compulsory Purchase Orders associated with Clearance Areas 89 houses were demolished during the year.

Displacements

During the year, 144 families comprising 453 persons were rehoused into Corporation houses from houses in Compulsory Purchase Order areas previously confirmed and from individually unfit houses.

Local Land Charges Register

The following table sets out the number of 'searches' made by the department over the past five years:

Year	1967	1968	1969	1970	1971
Searches	6,313	6,963	7,368	7,361	8,755

The upsurge in 'searches' during the year is indicative of the increase in the turnover of properties sold and purchased, and results in a corresponding increase in the number of enquiries and of correspondence from vendors and purchasers.

Corporation Mortgages

Mortgage applications to the Corporation are referred by the City Treasurer and Controller to the department for a report as to the suitability of the property as security for the loan. A table of the number of houses referred to and investigated over the past five years is set out below:

Year	1967	1968	1969	1970	1971
Investigations	1,127	1,047	847	1,275	1,276

Improvement Grants

The City Engineer and Surveyor refers to the department all applications for improvement grants for similar investigations as for those undertaken for mortgages. During the year 920 applications were received as compared with 511 applications in 1970. This reflects an increasing awareness of the value of improvement grants.

Council Housing Estates and Housing Applications

An inspector and a lady assistant are employed on this work. Their function is to inspect council houses which are vacant and to investigate claims for rehousing or transfer on the grounds of ill health. In addition the inspector carries out field work for the M.O.H. in connection with Home Dialysis. Details of this work are to be found in the report of the M.O.H.

Vacant houses inspected	..	..	..	..	..	1,129
Number found verminous	..	..	..	..	..	90
Number requiring disinfecting	..	..	..	..	..	90
Visits regarding transfers	..	..	..	..	..	316
Visits to council house applicants	..	..	..	..	..	237
Miscellaneous visits	..	..	..	..	..	337
Number of interviews at office	..	..	..	..	..	187
Number of visits in connection with home dialysis	..	..	..	..	..	133

Consideration was given during the year to a total of 994 applicants for rehousing. Of these, 394 were requests for transfers, of which 106 were recommended. The 600 applications for rehousing on medical grounds were dealt with as follows:

Recommended immediate rehousing	..	..	..	..	95
Awarded medical points	..	..	..	..	46
No action recommended	..	..	..	..	459

Of the 95 recommendations for immediate rehousing 52 were in respect of old age pensioners. This shows a small increase over the previous years.

The medical conditions cited by the 600 applicants for priority for rehousing or transfers are broadly classified as follows:

Pulmonary tuberculosis	..	..	..	..	4
Non-pulmonary tuberculosis	..	..	..	..	2
Asthma, bronchitis and other chest complaints	..	..	..	..	130
Nervous complaints and mental illness	..	..	..	..	140

Heart conditions	66
Rheumatism and arthritic conditions	54
Skin conditions	5
Physically handicapped	36
Other illnesses	163

Other illnesses accounted for the largest number of cases, with nervous complaints taking a second place. The general pattern of ailments remains as in 1970 with a slight decrease in arthritic conditions and slight increase in skin conditions. 'Other illnesses' include those which could not accurately be placed in any other category. They consist of a wide variety of complaints and occasionally conditions which are not primarily of medical concern.

House Repairs

The total number of notices served under all Acts was 975 preliminary notices and 230 statutory notices. The following summary gives principal details:

External

Roofs to be repaired or reslated	236
Gutters and rainwater pipes to be repaired, etc.	115
Walls and chimneys to be repointed/repared	82
Yards, paths to be repaired or resurfaced	12
Soil pipes to be repaired/renewed	16
Drains to be cleared/repared	183
Cesspools to be repaired/cleaned	1

Internal

Dampness to be cured	245
Interior walls and ceilings to be repaired	204
Floors to be repaired	93
Staircases, etc., to be repaired	23
Fireplaces and flues to be repaired	21
Verminous/filthy premises to be cleaned	43

In addition to work carried out by notices, works of repair were carried out by the Corporation by agreement with the owner at four houses in the city, at a total cost of £215 which will be recovered by instalments.

Legal Proceedings

The following is a tabulation of the outcome of legal proceedings to secure the abatement of nuisances.

Defendant No.	Offence	Fines	Costs	Total Penalties	Nuisance Order
3	Did fail to comply with a notice served under Section 93 of the Public Health Act, 1936	—	—	—	28 days
4	Do.	—	—	—	28 days
5	Do.	—	—	—	28 days
8*	Do.	—	Case withdrawn	—	—
9	Do.	—	—	—	14 days
10	Do.	—	—	—	28 days
12	Do.	—	—	—	28 days
14	Do.	—	—	—	28 days

*Works completed prior to court hearing.

Rent Act**PART I.—APPLICATIONS FOR CERTIFICATES OF DISREPAIR**

	1971	1970	1969	1968
1. Number of applications for certificates ..	1	—	2	2
2. Number of decisions not to issue certificates	Nil	Nil	1	Nil
3. Number of decisions to issue certificates ..	1	—	1	2
(a) in respect of some but not all defects ..	1	—	1	2
(b) in respect of all defects	—	—	—	—
4. Number of undertakings given by landlord under paragraph 5 of the First Schedule	—	—	—	—
5. Number of undertakings refused by local authority under proviso to paragraph 5 of the First Schedule	—	—	—	—
6. Number of certificates issued	1	—	1	2

PART II.—APPLICATIONS FOR CANCELLATION OF CERTIFICATES

7. Application by landlords to local authority for cancellation of certificates	2	6	—	4
8. Objections by tenants to cancellation of certificates	—	—	—	—
9. Decisions by local authority to cancel in spite of tenant's objection.	—	—	—	—
10. Certificates cancelled by local authority ..	2	5	—	4

Houses in Multiple Occupation

The house-to-house survey of three storey premises which was started in 1969 has continued throughout the year, and a further 1,636 houses have been visited. Of these, 96 houses were found to be occupied by three or more families and were inspected for the first time. This brought the total number of houses known to the department to be so occupied to 934.

As a result of these inspections it was necessary to serve 37 notices under section 15 of the 1961 Housing Act, in order to provide additional facilities. Progress made by the end of the year is set out below.

Number served	Notices served	
	Preliminary	Statutory
	37	19
Work completed	13	13
Work partly completed	2	4
Statutory notice served	19	—
Not expired 31.12.71	3	2

Items included in the notices were as follows:—

1. Improvement or provision of ventilation	73
2. Provision of hot/cold water supply	38
3. Provision of additional sinks	26
4. Provision of additional lighting points	22
5. Provision of additional cooking facilities	14
6. Provision of space heating	1

In addition, two houses were found to be statutorily overcrowded, and directions fixing maximum numbers were issued.

Legal Proceedings

It was not found necessary to institute legal proceedings during the year.

AIR POLLUTION

The tabulation of atmospheric pollution records are in part similar to last year. It has been possible to compare the local levels of pollution with those experienced in the country as a whole. During the year investigations into pollution from road vehicles and levels of trace metals to be found in the air has continued.

Deposited Matter

Figure 1 indicates the level of deposited matter at each of the three sites. The City Hall site shows a slight increase, while there is a slight decrease at the Curran Road and Moorland Road sites from the previous year.

Smoke

The measurements of smoke are shown in Table 1. The trend for each of the measuring stations for the past ten years is also shown. Figure 3, shows the level of smoke in the city in comparison with the Welsh and National levels of smoke concentration. It can be seen that there is a slight increase in the level of smoke pollution this year, following the slight decrease of last year. The rise in the average level results from slight increases in smoke measured at four of the six atmospheric pollution measuring stations.

Sulphur Dioxide

The levels of sulphur dioxide are indicated by Table 2. Figure 4 shows the level of sulphur dioxide (as an average of the six measuring stations in Cardiff) compared with the Welsh and National levels. It can be seen that during the year there has been a slight decrease in the level of sulphur dioxide pollution. This is shown up by the decrease in sulphur dioxide pollution at four out of six of the atmospheric pollution measuring stations. The trend for each of the measuring stations for the past ten years is also shown in Figure 5.

Alkali Works

The number of scheduled processes registered in the Alkali Act remain the same and the good relationship with the Alkali Inspector over the past years continues.

Pollution by Trace Metals

These pollutants which are generated into the atmosphere from special industries and motor vehicles were monitored again this year and some interesting points arose, as can be shown. Three trace metals were taken for comparison i.e., lead, zinc and cadmium. The same sampling point was used during the year for the monitoring of the above mentioned metals; it was at the Newport Road pedestrian bridge site.

Figure 6 indicates the level of lead found in the air at the Newport Road monitoring site as compared to the level of lead found in rural locations, conurbations, and industrial towns in the United Kingdom. The level of zinc at the Newport Road site is indicated by Figure 7, again, as compared with some rural conurbations and industrial towns in the United Kingdom. The level of cadmium is indicated by Figure 8. Also indicated on Figure 8 is the highest point recorded in urban air in the United States of America in 1970. Following a comparatively high reading of September and October investigations were carried out of firms in the vicinity of the sampling point and it was found that one firm stored cadmium plated fittings in considerable quantities. An atmospheric pollution monitoring mobile unit was installed near the factory, and one high level of cadmium was found out of a series of filter papers which had been taken over a period of a few weeks.

Towards the end of the year experimental use of a high through-put vacuum pump, using conventional filter media with a daily through-put of 1,000 cubic feet, has shown considerable promise. It is intended to continue our investigations on its use during the coming year, and to perfect a technique to use it to a much larger extent as a mobile atmospheric pollution monitoring station. The filter papers from this equipment are available for analysis daily, and this has many advantages over the conventional low through-put vacuum pump normally used.

Complaints

During the year 149 complaints about atmospheric pollution were received, this is again an increase on the previous year. The success of the preceding year continues in respect of the troublesome problem of burning of garden refuse. Petitions were received from residents in connection with grit from a paper mill, acidic smuts from a University College and also from a cigar factory. Towards the latter part of the year considerable difficulties were experienced with solid fuel burning plants, due to the non-availability of the correct fuels for the plants for their boilers because of the miners' strike. Difficulties in this particular direction were experienced with several hospitals and large industrial undertakings. Also, during the year, considerable problems were caused by one large joinery firm which was causing considerable nuisance to the inhabitants of the neighbourhood by emitting from their stack partly burned wood shavings in considerable quantities from a wood shavings incinerator. Due to pressure from this department, and the threat of impending prosecution, an undertaking was received in writing from the firm that the incinerator in question would be bricked up and not used again, and an impending court case was adjourned *sine die*.

Complaints were from the following sources:

Burning of garden refuse	19
Burning of refuse / shop and commercial premises ..	38
Smoke and/or grit - factory chimneys	23
Smoke from domestic chimneys	12
Dust from coal yards	6
Smoke from incinerators	9
Smoke from demolition sites and building sites ..	10
Smoke from burning of plastic covering of copper wire	6
Grit from hospital chimneys	10
Oil smutting	10
Motor fumes	2
Dust from road works	4

Routine Observation Visits, etc.:

Visits to industrial premises	212
Visits to commercial premises	54
Visits to domestic premises	112
Visits re prior approval	26
Visits to Atmospheric Pollution measuring stations ..	739
Observations - formal	15
Observations - informal	259

TABLE 1

Average, Highest and Lowest Values of Pollution by Smoke
(microgrammes per cubic metre)

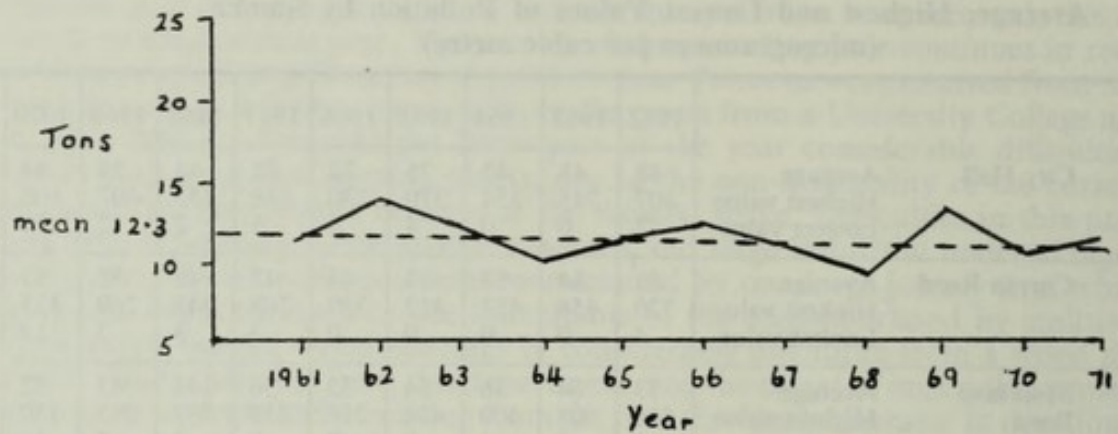
National Ref. No.			1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
D1	City Hall	Average	48	43	42	35	32	32	44	39	44	47
		Highest value	407	245	254	310	230	148	255	407	106	347
		Lowest value	2	0	0	4	4	5	2	2	10	7
C2	Curran Road	Average	89	84	83	54	44	47	46	52	53	54
		Highest value	720	456	452	412	339	268	343	269	136	353
		Lowest value	4	0	0	0	0	3	3	3	13	2
A2	Moorland Road	Average	73	64	56	54	32	36	43	63	52	39
		Highest value	536	508	400	484	216	255	387	293	150	215
		Lowest value	0	0	0	0	0	0	3	4	18	3
O1	Llanishen Reservoir	Average	33	31	27	21	19	16	15	14	23	25
		Highest value	220	202	201	168	138	94	172	98	53	188
		Lowest value	0	0	0	0	1	1	1	1	4	1
A1	Crofts Street	Average	96	76	82	65	54	55	53	59	51	56
		Highest value	438	381	512	440	298	295	271	257	118	309
		Lowest value	14	1	4	0	4	5	6	3	17	2
B3	Llanrumney Clinic	Average	39	42	41	32	30	30	28	35	28	35
		Highest value	289	193	219	222	248	165	174	140	76	164
		Lowest value	1	0	0	0	1	1	1	2	7	2

TABLE 2

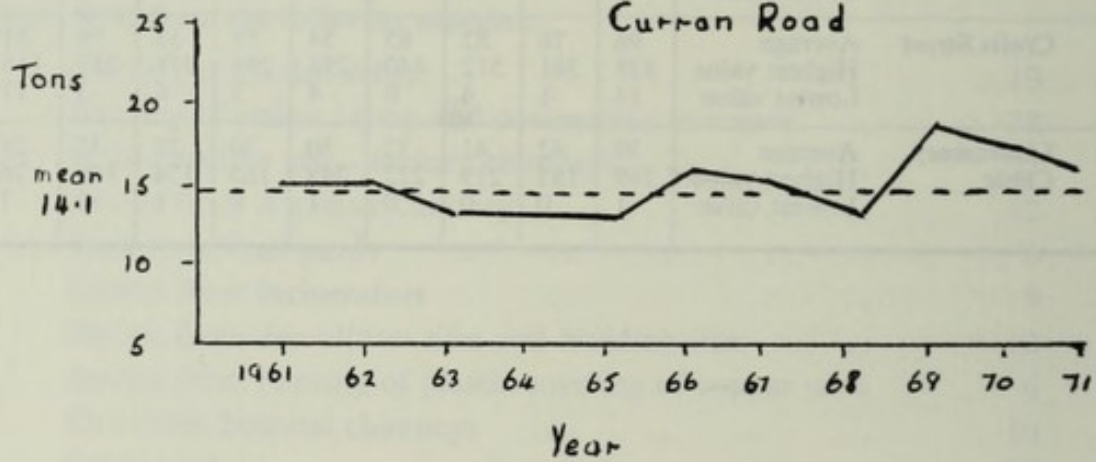
Average, Highest and Lowest Values of Sulphur Dioxide Pollution 1961 - 1971
(microgrammes per cubic metre)

National Ref. No.			1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
D1	City Hall	Average	69	70	69	66	67	60	99	119	107	84
		Highest value	298	375	283	375	325	267	375	316	223	408
		Lowest value	4	6	9	0	8	6	8	10	48	9
C2	Curran Road	Average	85	87	63	79	74	56	81	105	91	92
		Highest value	536	404	432	449	598	310	251	352	191	352
		Lowest value	6	3	0	0	0	0	0	11	38	10
A2	Moorland Road	Average	93	109	96	87	72	92	94	124	118	102
		Highest value	375	529	636	644	271	377	783	377	256	496
		Lowest value	12	0	0	0	0	0	0	0	48	13
O1	Llanishen Reservoir	Average	19	32	47	42	46	37	36	60	48	57
		Highest value	198	292	203	365	186	136	100	174	91	210
		Lowest value	0	0	0	0	6	0	0	0	21	15
A1	Crofts Street	Average	97	96	102	97	82	88	95	110	94	88
		Highest value	373	579	466	389	361	324	296	323	204	598
		Lowest value	4	0	16	8	9	14	21	22	48	7
B3	Llanrumney Clinic	Average	57	72	59	49	53	50	53	77	61	55
		Highest value	343	314	237	271	404	230	210	245	138	233
		Lowest value	0	7	0	0	0	0	0	6	25	7

City Hall



Curran Road



Moorland Road

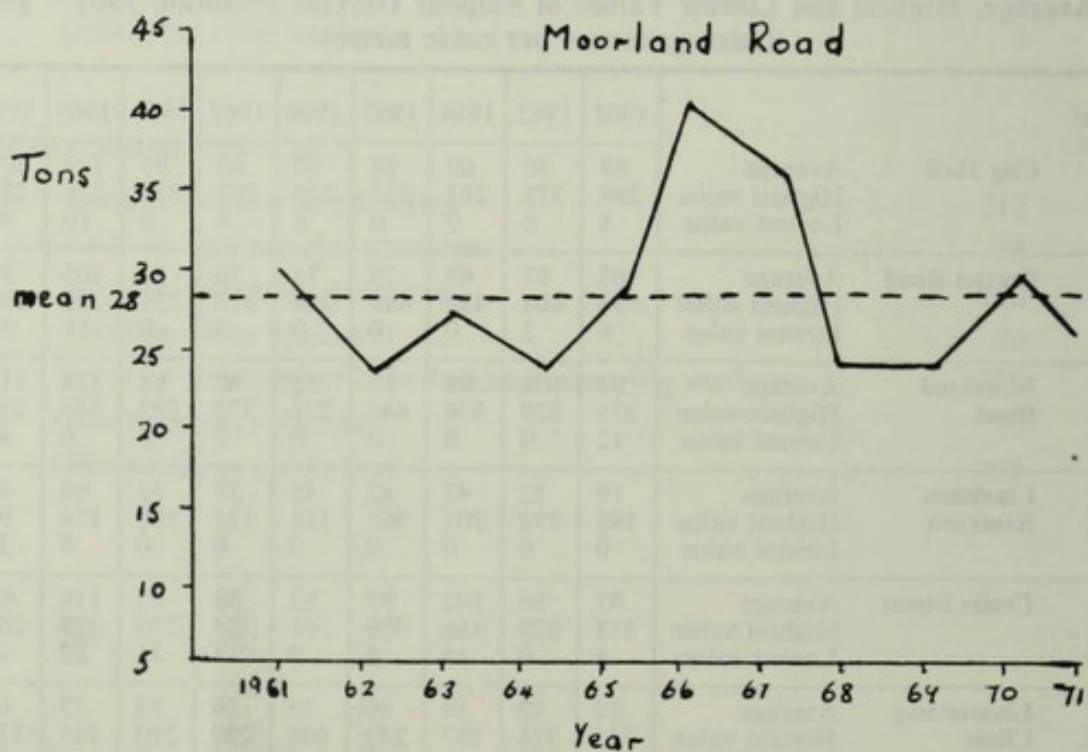


Figure 1 Yearly average of Monthly Rates of Deposition in Tons per Square Mile

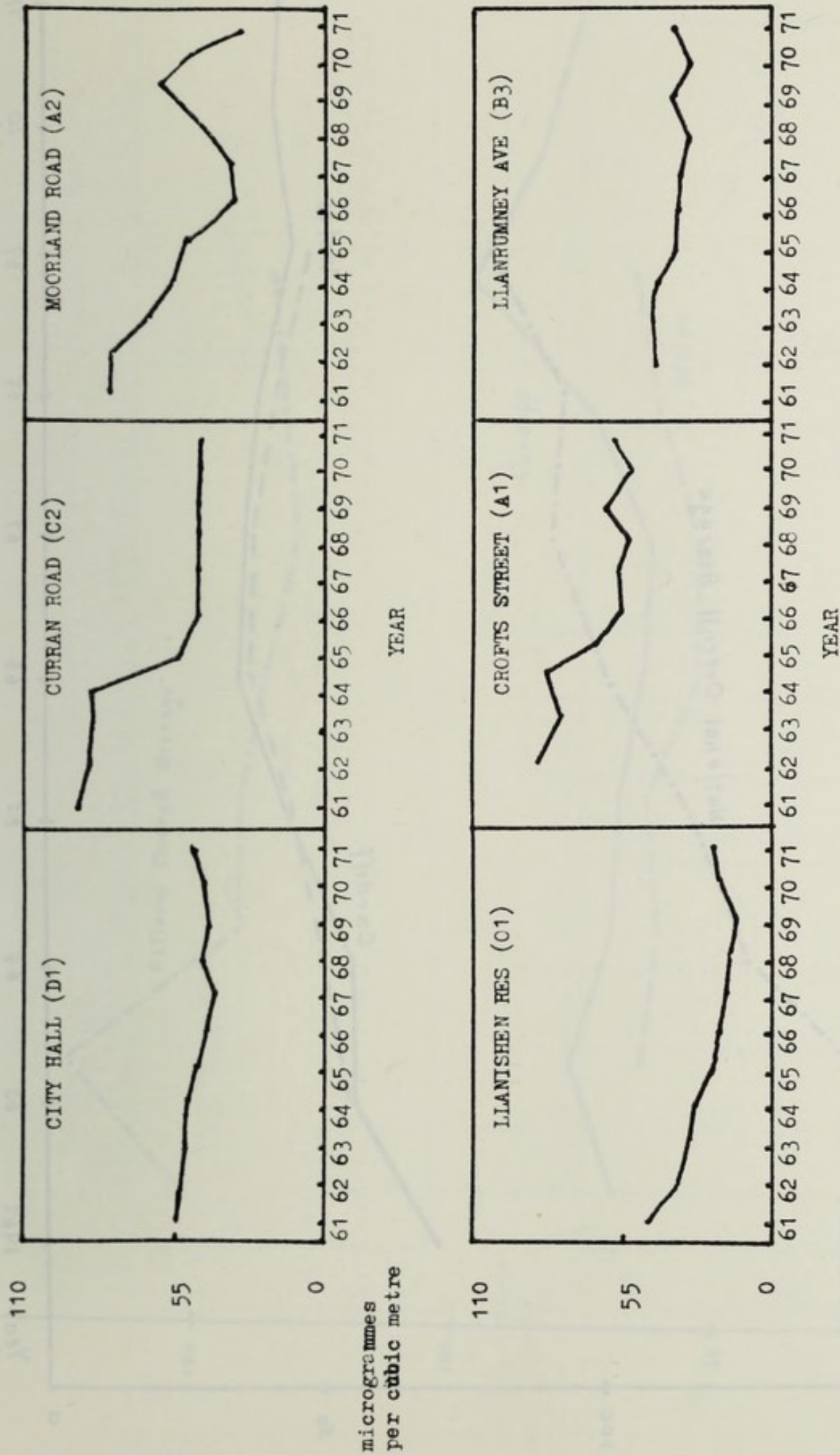


Figure 2 Cardiff Mean Trend Graphs of Average Pollution by Smoke 1961/1971

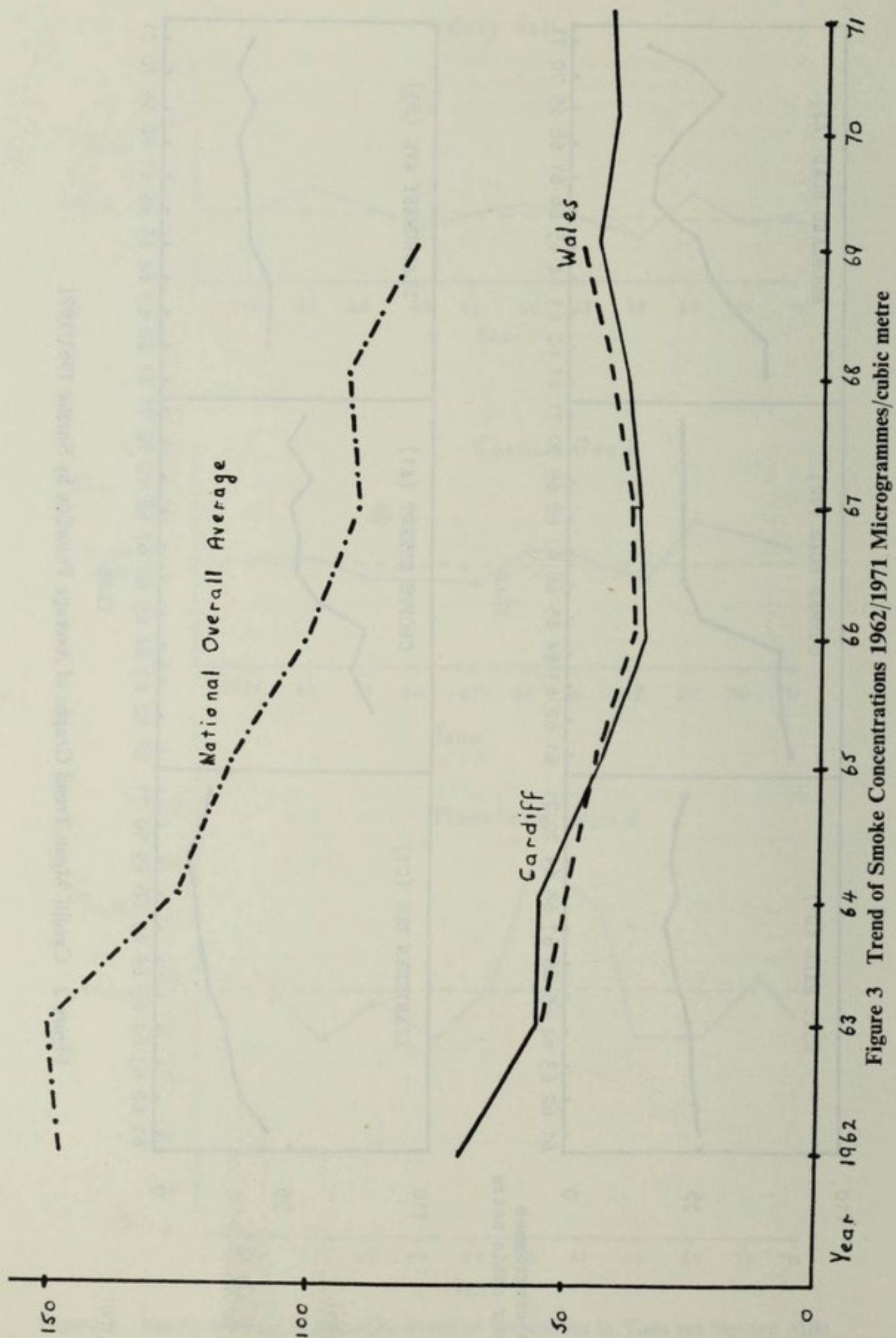


Figure 3 Trend of Smoke Concentrations 1962/1971 Microgrammes/cubic metre

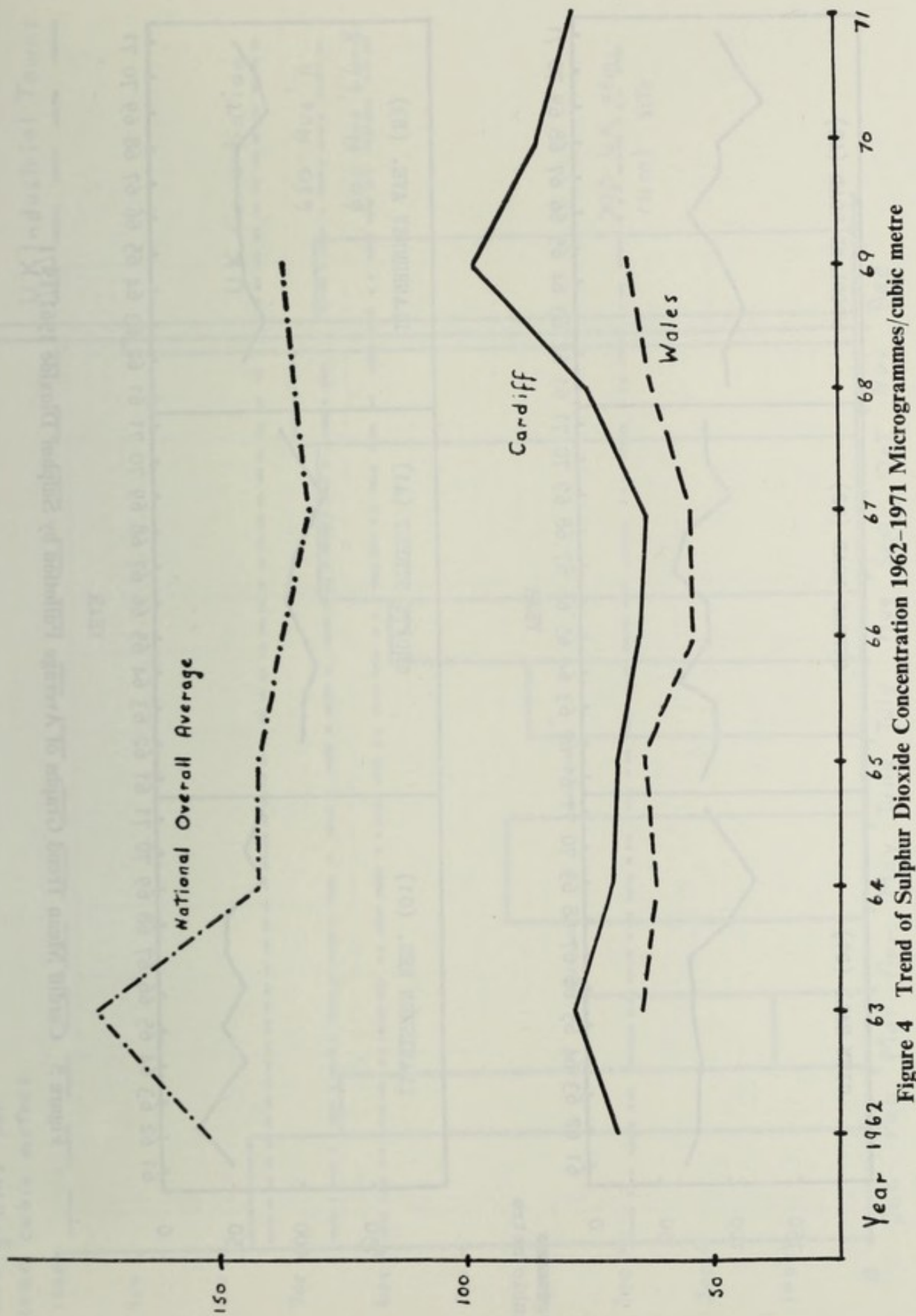


Figure 4 Trend of Sulphur Dioxide Concentration 1962-1971 Microgrammes/cubic metre

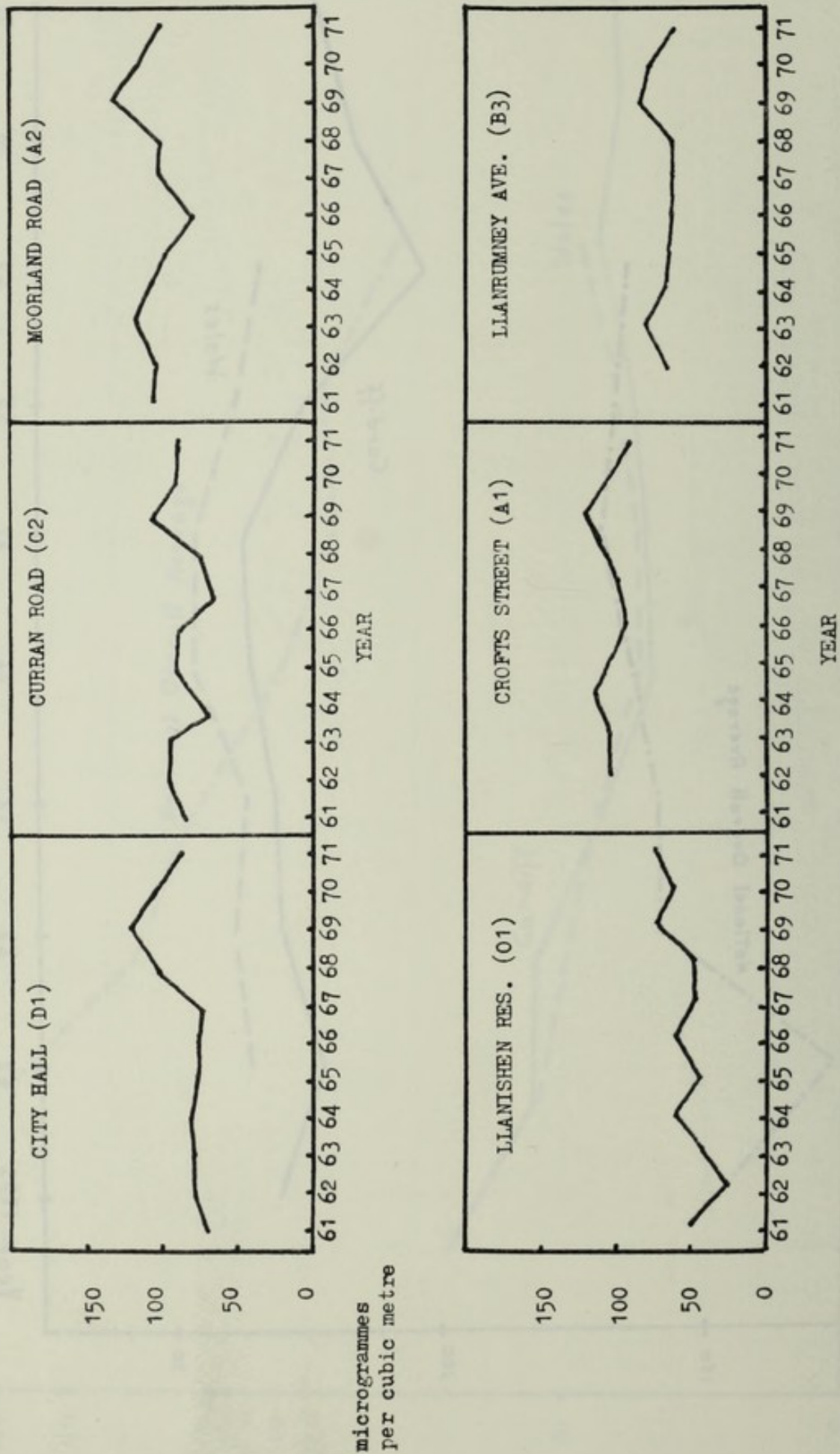


Figure 5 Cardiff Mean Trend Graphs of Average Pollution by Sulphur Dioxide 1961/1971

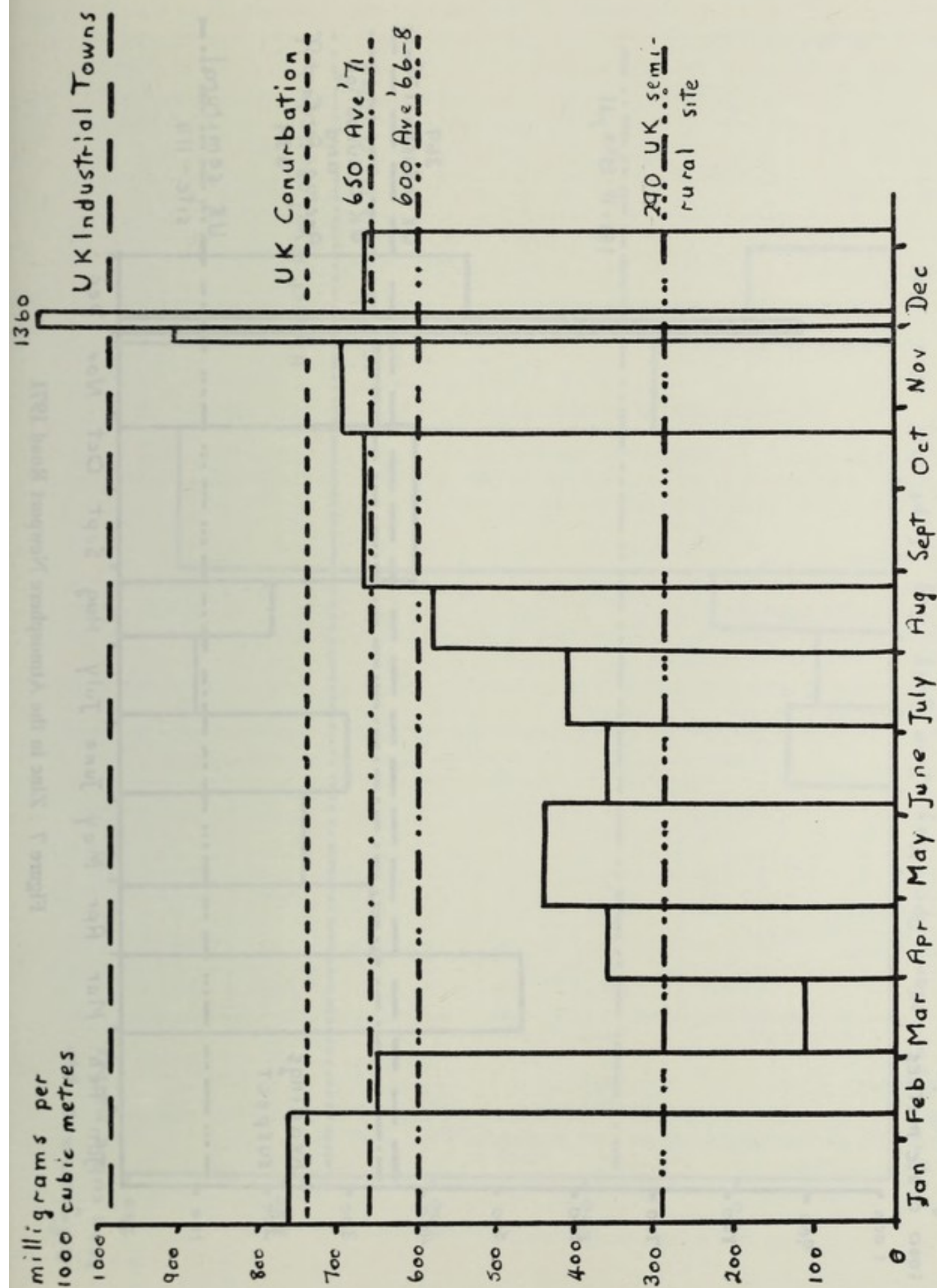


Figure 6 Lead in the Atmosphere Newport Road 1971

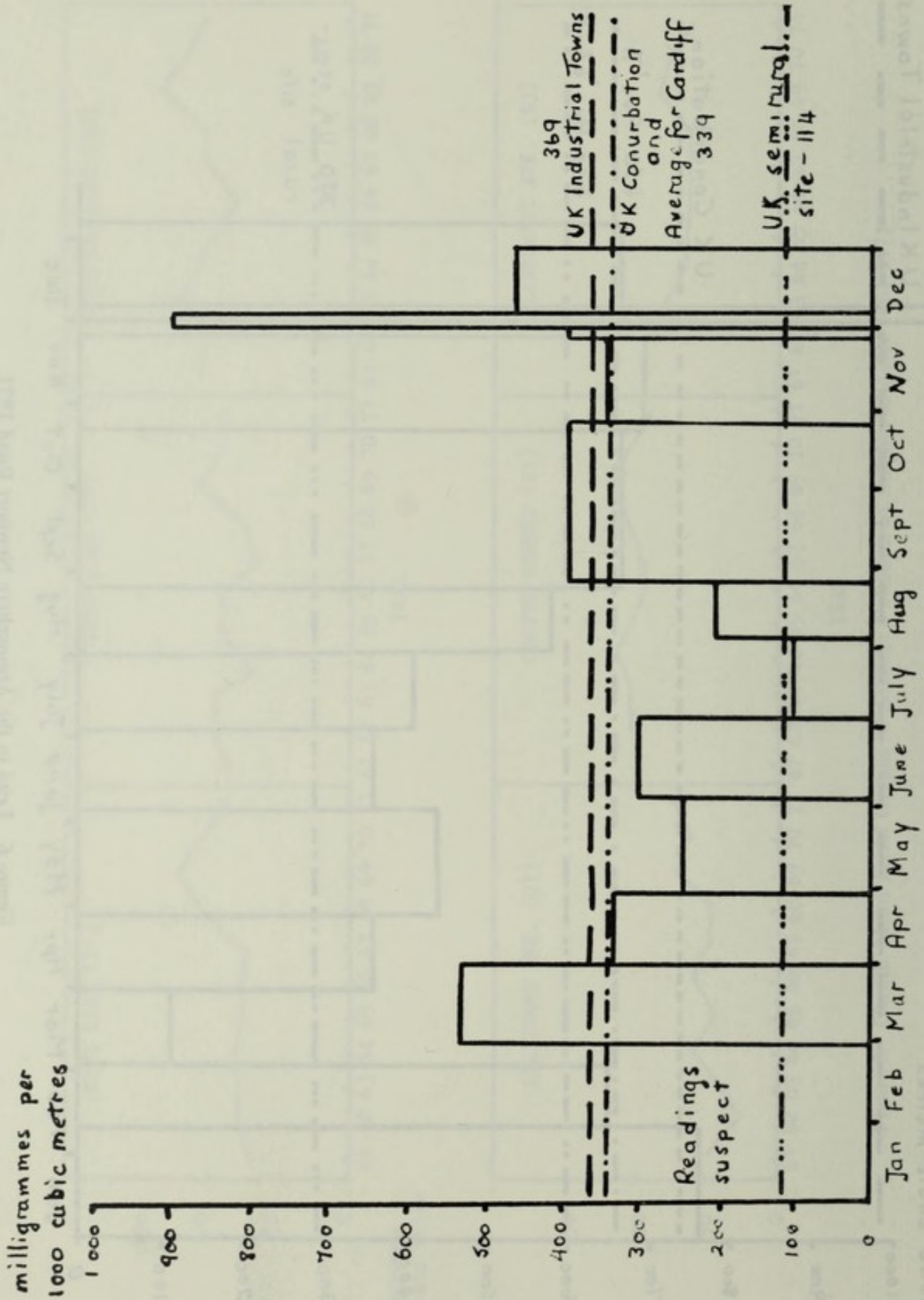


Figure 7 Zinc in the Atmosphere Newport Road 1971

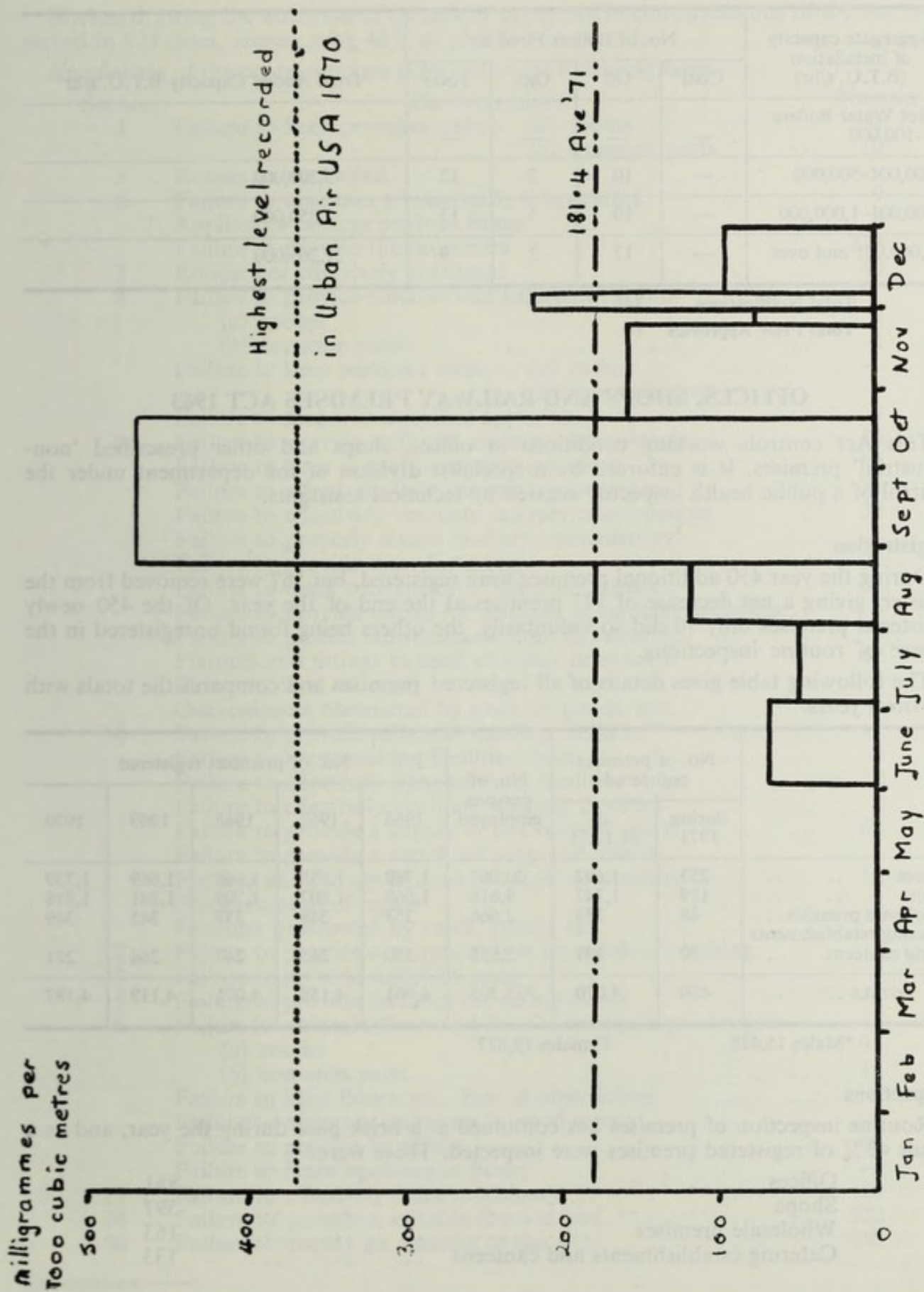


Figure 8 Cadmium in the Atmosphere Newport Road 1971

Notifications of New Installations

Aggregate capacity of installation (B.T.U.'s/hr)	No. of Boilers Fired By				Total Added Capacity B.T.U.'s/hr
	Coal	Oil	Gas	Total	
Hot Water Boilers 0-100,000	—	—	—	—	—
100,001-500,000	—	10	2	12	3,200,000
500,001-1,000,000	—	10	3	13	7,250,000
1,000,001 and over	—	17	2	9	31,265,000

Total Notifications 34

Total Prior Approvals 16

OFFICES, SHOPS AND RAILWAY PREMISES ACT 1963

This Act controls working conditions in offices, shops and other prescribed 'non-industrial' premises. It is enforced by a specialist division of the department under the control of a public health inspector assisted by technical assistants.

Registration

During the year 450 additional premises were registered, but 567 were removed from the register, giving a net decrease of 177 premises at the end of the year. Of the 450 newly registered premises only 10 did so voluntarily, the others being found unregistered in the course of routine inspections.

The following table gives details of all registered premises and compares the totals with previous years.

	No. of premises registered		No. of persons employed	No. of premises registered				
	during 1971	at 31.12.71		1966	1967	1968	1969	1970
Offices	253	1,692	20,067	1,789	1,738	1,668	1,669	1,739
Shops	119	1,747	9,616	1,669	1,807	1,799	1,841	1,818
Wholesale premises ..	48	334	2,666	353	348	337	345	349
Catering establishments and canteens ..	30	297	2,956	250	265	267	264	281
TOTALS	450	4,070	*35,305	4,061	4,158	4,071	4,119	4,187

*Males 15,428

Females 19,877

Inspections

Routine inspection of premises has continued at a brisk pace during the year, and as a result 43 % of registered premises were inspected. These were:

Offices	881
Shops	597
Wholesale premises	163
Catering establishments and canteens	133
	<hr/>
	1,774

Additionally 4,888 other visits were made including follow-ups to notices served, and to check whether unregistered premises were, in fact, registrable.

Operation of the general provisions of the Act

Notices drawing the attention of owners or occupiers to contraventions of the Act were served in 825 cases, representing 46% of premises inspected.

An analysis of the contraventions is set out in the following table.

Section	Contraventions	Number
4	Failure to keep premises clean – (a) rooms	42
	(b) common parts	10
5	Rooms overcrowded	—
6	Failure to maintain a reasonable temperature	9
	Appliances causing noxious fumes	5
	Failure to provide thermometers	239
7	Rooms not effectively ventilated	40
8	Failure to provide suitable and sufficient lighting	
	(a) rooms	2
	(b) common parts	1
	Failure to keep windows clean – (a) rooms	—
	(b) common parts	—
	Failure to maintain electrical apparatus	9
9	Failure to provide sufficient sanitary conveniences	15
	Failure to keep sanitary conveniences clean	85
	Failure to effectively light sanitary conveniences	31
	Failure to effectively ventilate sanitary conveniences	32
	Failure to properly screen sanitary conveniences	8
	Failure to provide door fastenings	25
	Failure to mark conveniences 'male' or 'female'	37
	Failure to provide means for disposal of sanitary dressings	6
	Failure to protect conveniences from the weather	3
	Fixtures and fittings in need of repair or renewal	42
	Floors in need of repair	6
	Conveniences obstructed by stock or goods, etc.	6
10	Failure to provide sufficient washing facilities	12
	Failure to keep washing facilities clean	4
	Failure to effectively light washing facilities	2
	Failure to effectively ventilate washing facilities	2
	Failure to provide a supply of hot running water	82
	Failure to provide a supply of soap and towels	1
	Fixtures and fittings in need of repair or renewal	10
	Floors in need of repair	2
	Facilities obstructed by stock, goods, etc.	1
12	Failure to provide accommodation for outdoor clothing	1
13	Failure to provide sufficient seats	1
15	Failure to provide facilities for eating meals	—
16	Failure to maintain floors and floor coverings in good repair	
	(a) rooms	91
	(b) common parts	18
	Failure to keep floors, etc., free of obstruction	2
	Failure to maintain staircases in good repair	6
	Failure to provide handrails	48
	Failure to fence openings in floors	—
17	Failure to effectively fence machinery	10
24	Failure to provide a suitable first aid box	522
50	Failure to display an abstract of the Act	450

Exemptions

No further applications for exemptions were received during the year. One exemption (section 9 – sanitary conveniences) remains in operation, having been extended during the year.

Accidents

One hundred and two accidents, involving the loss of three or more days work, were notified during 1970. Details of the type of premises where these accidents occurred, their causes and the injuries sustained, are set out in following tables:

Accidents	Class of Premises				
	Offices	Shops	Warehouses	Catering establishments and canteens	Total
No. of accidents notified	18	48	21	15	102
No. investigated	6	5	6	4	21
Action taken					
Prosecution	—	—	—	—	—
Formal warning	—	—	—	—	—
Informal advice	5	3	3	2	13
None	1	2	3	2	8
Causes of Accidents					
Machinery	2	—	—	2	4
Transport	—	—	1	—	1
Fire and explosion	—	—	—	—	—
Electrical	—	—	—	—	—
Hand tools	—	8	—	1	9
Falls of persons	8	18	5	5	36
Stepping on or striking against object or person ..	3	5	4	2	14
Handling goods	1	12	6	3	22
Struck by falling object	4	4	3	2	12
Not otherwise specified	—	1	2	—	3
Injuries sustained					
Fractures and dislocations	2	5	1	1	9
Sprains and strains	3	17	11	3	34
Internal injury	—	—	1	—	1
Amputation	—	—	—	—	—
Open wounds and surface injury	5	13	2	5	25
Bruising, crushing, concussion	7	12	6	4	29
Foreign body in orifice	—	—	—	—	—
Burns	—	—	—	2	2
Poisoning	—	—	—	—	—
Multiple injuries	1	1	—	—	2
Other injuries	—	—	—	—	—

One accident resulted in a fatality. A warehouseman employed by a warehousing and haulage company was assisting in the off-loading of a compressor from a flat platform lorry. This operation involved the sliding of the compressor from the lorry onto a pallett, which was resting on the raised forks of a fork lift truck parked alongside the lorry.

He had just placed the pallett on the raised forks of the truck, which was standing several feet from the side of the lorry, on sloping ground – the incline being towards the side of the lorry. He moved away, and the driver of the truck released the handbrake and the truck rolled forward under its own momentum towards the side of the lorry. At the same time, the warehouseman turned around and passed between the truck and lorry, and was trapped against the side of the lorry by the pallett, which was at a height of approximately four feet above ground level. There was no obvious reason for this action, and no explanation has been forthcoming during investigations.

Lift and Hoist Regulations

Inspection of lifts has continued, and by the end of the year, 442 lifts in 274 premises had been inspected. Owners and occupiers of premises are becoming increasingly aware of their responsibilities, and there has been a noticeable improvement in the condition and maintenance of many lifts as a result of the enforcement of the regulations. This task has been much simplified by the good relationship which has developed between the department and the insurance company engineers and lift companies.

Faults on installations come to the notice of the department in two ways – during inspections by members of the department, and on inspection reports sent to the department by the lift engineers in accordance with regulation 6. The following is a summary of the faults occurring in 1971:

Repairs required to

(1)	Gates	6
(2)	Lift car	2
(3)	Liftway	4
(4)	Control gear	27
(5)	Motor room	3

Legal Proceedings

It was not found necessary to resort to legal proceedings during the year. This is the first such occasion since the commencement of the Act in 1964, and it is to be hoped that such a state of affairs has been achieved as a result of the adoption of a policy of co-operation with occupiers of premises.

FACTORIES ACT 1961

1. INSPECTIONS for purposes of provisions as to health

PREMISES (1)	Number on Register (2)	Number of		
		Inspections (3)	Written notices (4)	Occupiers prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities ..	8	5	2	Nil
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority ..	995	570	80	Nil
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	7	7	2	Nil
TOTAL	1,010	582	84	Nil

2. Cases in which DEFECTS were found

PARTICULARS (1)	Number of cases in which defects were found				Number of cases in which prosecutions were instituted (6)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	Referred by H.M. Inspector (5)	
Want of cleanliness (S.1)	—	—	—	—	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7)					
(a) Insufficient	3	3	—	—	—
(b) Unsuitable or defective	75	68	—	2	—
(c) Not separate for sexes	6	6	—	—	—
Other offences against the Act (not including offences relating to outwork) ..	—	—	—	—	—
TOTAL	84	77	—	2	—

3. Outworkers

NATURE OF WORK (1)	SECTION 133			SECTION 134		
	No. of outworkers in August list required by Section 131(1) (c) (2)	No. of cases of default in sending lists to the Council (3)	No. of prosecutions for failure to supply lists (4)	No. of instances of work in un-wholesome premises (5)	Notices served (6)	Prosecutions (7)
Textile weaving	6	—	—	—	—	—
TOTAL	6	—	—	—	—	—

RODENT CONTROL 1971

Six rodent operatives are employed under the control of a rodent officer.

Sewers

In March, April, May, October and November 1971, 64 districts with a total of 4,463 manholes were all treated with fluoracetamide.

Local Authority Premises

These include public works yards, workshops, bus depots, schools, parks, baths, Law Courts, City Hall, Central Market and each of the refuse tips within the city. All have been treated during the year, in most cases as many as four times.

Maintenance of Business Premises

During the year the Corporation undertook to maintain treatments at various intervals for 346 business premises which include cafes, food stores, shops, warehouses, cinemas, bingo halls, clubs, offices, bakehouse, hotels, garages, banks, engineering works, an ice-cream factory, steel mills, building sites, a farm, bus depots, refuse tips and cleansing depots.

This is two fewer than in 1970, contracts ranged from £3.60 to £100 and the total income amounted to £5,123.40. Single treatments for 442 business premises were also carried out for the sum of £1,370.25, thus the total income from business premises was £6,493.65, being £1,165.65 more than 1970 due to an increase of 20% on previous charges.

Of the 788 premises which were treated, 502 were for mice, 132 for rats, 134 for rats and mice, 26 were free from rats or mice.

The bodies of 1,960 mice and 153 rats were removed by the operatives during and after treatments.

The poisons used were 10% of No. 5 Warfarin with medium oatmeal base for rats (still proving satisfactory) and alpha chloralose, which is reasonably successful for mice.

Private Dwellings

A free service is given to domestic premises and during the year 2,054 complaints were received and investigated (95 fewer than 1970).

In all 592 premises were dealt with for rats (mostly for rats which had been seen outside the premises and in many cases for the same infestation, 1,003 for mice (94 more than last year).

In 149 instances treatment proved there was no infestation. In the case of the remaining 310 complaints initial survey failed to establish the existence of any infestation, the complaints often having been due to a single rat having been seen in the vicinity. Other complaints often arose out of fear that empty premises or a neglected piece of land nearby might become infested. Eighty-seven suspect drains (the same number as last year) were reported by the operatives, the majority proved to be defective on being tested.

Schools

During the year 110 complaints were received from 51 schools, 88 for mice (mostly in school kitchens), 17 for rats and 5 for rats and mice.

Pigeons

No complaints were received except from the Markets Committee re the entrance to the Central Market, which is still being considered.

Analysis of Surface Infestations

The surface infestations traced during the year are analysed on the following tabulation prescribed by the Ministry of Agriculture, Fisheries and Food. The terms in the tabulation have the meanings assigned to them by that Ministry's Form I.R.31.

PROPERTIES OTHER THAN SEWERS	TYPE OF PROPERTY	
	Non-Agricultural	Agricultural
1. Number of properties in district	101,643	51
2. (a) Total number of properties (including nearby premises) inspected following notification	14,104*	—
(b) Number infested by (i) rats	784	—
(ii) mice	1,457	—
3. (a) Total number of properties inspected for rats and/or mice for reasons other than notification	346	—
(b) Number infested by (i) rats	183	—
(ii) mice	908	—

*Included in this figure are 10,331 food hygiene visits by public health inspectors.

NOISE ABATEMENT

In the 1970 report it was noted that there had been a substantial increase in complaints of noise nuisance. This trend has continued and in fact the number of complaints actually doubled this year.

In addition to the investigation of complaints, surveys were undertaken to assess ambient traffic noise levels in various parts of the city which provided useful information. The last major traffic noise survey was carried out from October to December, in conjunction with a firm of noise consultants, the object being to provide evidence to be produced at the local Public Enquiry on Cardiff's proposed Urban Motorway. Other surveys were also undertaken, following complaints of noise nuisance emanating from major road traffic, to assess levels within dwellings. Due to the lack of any local standards on noise levels that are capable of causing annoyance, this work is to be extended to include a social survey together with noise measurement so that a dossier can be built up showing local reaction to noise that has its origin in industry or road traffic. This should provide a useful yardstick for future guidance in assessing nuisance and further the cause of noise abatement.

During the year the department obtained a range of sophisticated noise measuring equipment and is now capable of carrying out virtually any noise investigation. In so far as complaints concerning industrial and commercial premises are concerned, in assessing nuisance, the various recognised standards in BS4142, noise rating and noise criteria numbers, and the Wilson standards are employed in addition to subjective assessments. When a nuisance is found to exist then a complete survey can be undertaken on behalf of the industry concerned, culminating in advice on methods of abating the nuisance in question.

The city Public Works Department is interested in noise control of pneumatic tools, and tests have been carried out on the behalf of the department upon various silenced and muffled drills and drill bits. It is now unusual to see Corporation workmen using unmuffled or unsilenced tools. In the private sector, too, contractors appear to be using mufflers to a greater degree.

One complaint which serves to illustrate the benefit of possessing sophisticated equipment was originally from a Penarth resident who complained of a whining noise from the docks area of Cardiff that was periodically interfering with his and his family's sleep. Other residents of Cardiff, all distant from this industrial area substantiated the complaint.

In view of the fact that the complainants' houses were all out of sight of the offending industrial concern, and other factories in the area produced noise so similar that even when the complainants were taken to each in turn, they could not identify the responsible factory, it seemed possible that it could be a combination of these factories which were causing the nuisance. This problem was solved by tape recording the sound at the complainants' house and then tape recording the noise produced by separate factories in the docks area in turn. The tapes were then analysed on a narrow band analyser which enabled the offending noise to be identified. The interesting point was that some complainants were hearing noise from one factory predominantly, and others from two factories simultaneously. As a result of the investigation both firms are now trying to reduce their noise level emanation, in both cases from fans.

To add a lighter note, one complaint was received of gunfire during a military tattoo.

Throughout this period no statutory abatement notices were served, although authority was sought to serve notice in one case. This, as in previous years indicates the willingness of all concerned to take positive action to reduce noise emission. In most cases, provided an effective and relatively cheap remedy could be suggested, the works were carried out within a reasonable time.

Statistics

The number of complaints received during this period totalled one hundred and fifty-five and were from the following sources.

Domestic Total number of complaints 32.

Noisy neighbours (shouting, banging doors, music, redecorating, children, etc.)	..	..	..	..	20
Fish tank (electric motor)	..	..	..	..	1
Central heating boiler	..	..	..	..	1
Noisy dogs	..	..	..	..	2
Gunfire (military tattoo)	..	..	..	..	1
Church bells	..	..	..	..	1
Complaints from mentally ill of fictitious noises	..	..	..	..	4
Ice Cream chimes	..	..	..	..	2

Commercial Total number of complaints 37

Breakdown fridge compressors	..	..	..	..	11
Clubs, pubs, restaurants (music)	..	..	..	..	13
Music from other commercial premises	..	..	..	..	3
Doughmixer in bakery	..	..	..	..	1
Shoe repairs	..	..	..	..	1
Butcher's bow/chopper and mincer	..	..	..	..	1
Boiler installation	..	..	..	..	3
Dry cleaning firm	..	..	..	..	1
Others	..	..	..	..	3

Industrial Total number of complaints 86

Breakdown fan noise	..	..	..	..	15
Breakdown transformers	..	..	..	..	2
Construction Noise (road works – building operations)	..	..	..	..	16
Railway repair yards/operations	..	..	..	..	2
Loading and unloading of vehicles	..	..	..	..	3
Repairs to power tools	..	..	..	..	1
Road traffic	..	..	..	..	13
Garage (m.v. repairs)	..	..	..	..	4
Refiners (paper mills)	..	..	..	..	3
Printing works	..	..	..	..	1
Pumps and industrial compressors	..	..	..	..	8
Woodworking factories	..	..	..	..	1
General industrial noise	..	..	..	..	5
Others	..	..	..	..	9

The investigation of these complaints resulted in a total of 1,626 visits.

GENERAL ENVIRONMENTAL HYGIENE

Complaints and inspections

4,149 complaints were received by the department during the year. In addition the district inspectors received 577 complaints in the course of their work. 4,217 re-visits were made in dealing with the above complaints together with 26,745 other visits and interviews, details of which are given in other sections.

Drains and Sewers

As in previous years there has been growth in both private and local authority building sectors, but the sewage disposal system of the city has remained reasonably satisfactory. No major sewerage schemes have been carried out, the main activity has been the provision of additional minor sewers for new housing developments, mainly in the Llanedeyrn area. The programme of routine repair and maintenance has been carried on together with minor improvements to existing sewers. 3,070 visits were made by the district public health inspectors in connection with drainage trouble; 19 drains were partially re-constructed and 5 entirely so. In 123 cases, minor repairs were carried out. 82 drains were cleared of blockages by owners and occupiers and 1,067 were cleared by the Corporation sewermen. 791 drain tests were carried out by means of colour, smoke and other means. 103 of these tests were carried out following reports from the rodent control section. 10 water samples were taken for chemical analysis during the course of investigations into drainage trouble.

WATER SUPPLY

Water Purity

Cardiff Corporation Waterworks Department supplies domestic water to 87,216 dwelling houses with a population of 276,790 within the city boundary. All house supplies are piped direct from the water mains; there are no standpipes for communal domestic use.

Supply in the city has been satisfactory in both quality and quantity. In the routine programme of sampling, 1,997 bacteriological samples were taken by the Water Department of which 1,005 were from the distribution system, and 992 from raw water sources at Llandegfedd, Cantref and Llwynon reservoirs. 1,392 chemical samples were taken also, 420 of that being from the distribution system and 753 from raw water at the treatment works. Many chemical samples were unsatisfactory in some respect, e.g. in the amount of iron or manganese present but all were considered safe and suitable as drinking water.

In addition 101 bacteriological and 54 chemical samples were taken from households, schools and food premises by public health inspectors. All the bacteriological samples were satisfactory, save for one taken from raw water at an adventure centre hostel in the Brecon Beacons, when the department was investigating in conjunction with the Water Department. Two chemical samples taken from the stream feeding the hostel feeder tank were satisfactory.

The programme of cleaning the older cast iron mains was continued, 22,000 yards were foam swabbed. Where repair works have been carried out, chlorination dosages are increased temporarily until follow-up samples prove satisfactory.

Fluoride Content

No analysis has been made recently but the content is known to be negligible. The City Analyst reported the fluoride content of the various supplies in 1965 to be as follows:

	<i>Fluoride content in parts per million</i>			
Llandegfedd treated water (Croft Street)	0.070
Cantref mixed filtered water	0.030
Llwynon mixed filtered water	0.030

Plumbo Solvency

There is no serious solvency problem, the raw water at Cantref and Llwynon reservoirs tends to be plumbo solvent but remedial action is taken by reducing the amount of organic matter by coagulation and filtration and raising the pH value by the addition of lime.

During the past year this department has carried out several investigations into the purity of water which is conveyed in lead pipes. Of these investigations two proved to be of particular interest. The first concerned a private householder who seeing a television programme about plumbo-solvency wrote to the City Analyst expressing his fears as he lived in an old house, the water piping of which was all in lead. The second was as a result of routine samples taken by public health inspectors, in this case a drinking tap in a public park.

In both incidents the method of investigations was the same, routine samples were taken during the day starting in each case with first runnings after an 8 hour contact period, followed by samples at 10 minutes, 30 minutes, 3 hours and 16 hours, in addition other check samples were taken within three days.

In the case of the private house traces of lead were found in the kitchen tap only after an 8 hour contact period, once the first few gallons of water had been run off there were no other traces of lead. The water from the bath however did contain traces of lead each time samples were taken, varying from 0.2 p.p.m. from the first runnings up to 0.07 p.p.m. after 16 hours. It was felt that these amounts did not constitute a serious health risk and the owner of the house was informed in writing that the only precautions necessary were to run off two or three gallons of water to waste from each tap prior to using it for drinking purposes.

The water from the public drinking tap presented a more serious problem, a series of water samples taken over a period of ten days revealed an average lead content of 0.04 p.p.m. and an iron content which varied between 0.32 and 1.6 p.p.m. The water supply to this tap has been discontinued pending a decision to replace the entire length of the pipe serving the tap.

These two incidents illustrate the importance of both the routine and random drinking water sampling carried out by public health inspectors, in particular samples from older properties in the city.

SWIMMING BATHS

There are 10 local authority swimming baths, 2 of which are specially designed for hydrotherapy work with handicapped children, and 3 paddling pools. In addition there are two privately owned pools which are visited by the department. Field tests for chlorine content were carried out on 262 occasions; 215 bacteriological and 17 chemical samples were taken for examination. No unusual trouble arose from the use of any of the pools, and no complaints were received which speaks well for the standard of maintenance generally. Several poor bacteriological results were obtained from one paddling pool during warm weather. These were overcome by increasing the chlorine dosage. The chemical samples were generally satisfactory, but in the case of 5 samples a recommendation was made by the City Analyst to increase the alkalinity of the pool water.

A description of each bath and the results of the bacteriological samples are given in the following tables.

Address	Description	Source of water used for filling	Method of Treatment	Frequency of water changing
Guildford Crescent (Mixed) (enclosed)	75' x 27' x 6' 60,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Male	60' x 22' x 6' (2' 9") 30,000 gallons			
Female	50' x 22' x 6' (2' 9") 30,000 gallons			
Empire Pool (Mixed) (enclosed)	165' x 60' x 16' (3') 636,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Llandaff Fields (Open-air, Mixed)	150' x 90' x 6' 10" (1' 8") 500,000 gallons	Mains Water	Filtration and continuous chlorination	Ten-hourly circulation
Sploott (Open-air, Mixed)	100' x 30' x 6' (2') 100,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Howells School (Girls) (enclosed)	70' x 30' x 8' (2' 6") 65,000 gallons	Mains Water	Filtration and continuous chlorination	Eight-hourly circulation
Ely Paper Mills Factory (Open-air, Mixed)	80' x 25' x 6' (4') 62,500 gallons	Mains Water	Chlorinated by hand (Hypochlorites)	Emptied and refilled weekly
Glan-y-Nant School (enclosed)	64' x 22' x 8' 6" (3') 49,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Greenhill Special School (enclosed)	17' x 23' x 4' 6" (2' 6") 12,000 gallons	Mains Water	Filtration and semi-automatic	Four-hourly circulation
Fitzalan Technical School (enclosed)	66' x 24' x 3' 3" (8' 6") 57,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Ty Gwyn Junior Training Centre (enclosed)	12' x 5' x 3' 1,125 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation

Swimming Baths: Bacteriological Examination

BATH	No. of Samples	Coliform bacilli per 100 ml.	Faecal coli per 100 ml.
Guildford Crescent (Mixed) ..	26 1	0 2	0 0
Guildford Crescent (Male) ..	24 2 1	0 18+ 2	0 6 2
Guildford Crescent (Female) ..	25 1 1	0 18+ 16	0 18+ 2
Empire Pool	50 1 1	0 2 9	0 0 3
Llandaff Fields	7 1	0 1	0 0
Llandaff Fields Paddling Pool ..	7 1	0 18+	0 18+
Splott Open-air	14 1	0 1	0 1
Splott Paddling Pool	7 1	0 2	0 2
Howells School		Closed for alterations	
Ely Paper Mills	5	0	0
Glan-y-Nant School	9	0	0
Heol Brynglas Special School ..	9 2	0 18+	0 18+
Fitzalan Technical School ..	4	0	0
Ty Gwyn Junior Training Centre	2	0	0
Victoria Park Paddling Pool ..	6 1 3 1 1	0 18+ 18+ 16 3	0 18+ 16 16 3

Refuse Disposal and Collection

The Engineer and Surveyor states that with the completion of the tip at Hailey Park at the end of July 1970, all Cardiff refuse has been disposed of at the two remaining sites at Leckwith Moors and Llanedeyrn. No major rat infestation or insect trouble arose due to efficient routine control measures.

Renewal of Household Dustbins

The Cleansing Superintendent states that due to reorganisation, the post of dustbin inspector was discontinued, so that no inspections were carried out under section 75 of the Public Health Act 1936. It had been demonstrated that the process was not producing the desired result, accordingly effort was directed towards developing a suitable scheme for the provision of municipal refuse containers.

In addition to the pilot scheme using plastic dustbins with dustless hinged lids, a further pilot scheme was introduced on one complete refuse collection round using plastic sacks as bin liners. This scheme has been extremely well received by residents, and has resulted in much improved working conditions for the collectors, and a virtual elimination of spillage on to the streets, so that it is proposed to extend the plastic sack bin liner principle to all households as soon as finance permits.

Disposal of Abandoned Vehicles

During the year the Cleansing Superintendent made arrangements for 59 abandoned cars to be collected by Thompson Metals Limited, who disposed of vehicles at their fragmentation plant at Barry Dock, Glamorgan. The Slag Reduction Company Limited, of Rover Way, Cardiff, also accepted, on behalf of the Council, without charge, a further 50 cars delivered by the owners. These arrangements provided a satisfactory outlet for old vehicles leaving no excuse for illegal abandonment of vehicles on the public highway or on open land.

Civic Amenities Act 1967

The containers maintained for the acceptance of bulky items of refuse from Cardiff residents sited at the main district cleansing depots at Waungron Road, Wedal Road, Colchester Avenue and Trade Street continue to be well used by the public, and provide a free outlet for such rubbish. The facilities for the disposal of abandoned vehicles and bulky items of refuse have been regularly publicised in the local press.

Infectious Diseases – Epidemiological Enquiries

A full report on the incidence of infectious and other diseases appears on page 7 in the section 'Notifiable Diseases'. Investigations into the epidemiology of infectious diseases together with sampling for bacteriological and chemical examination are carried out by a senior specialist public health inspector.

Visits made in connection with infectious diseases were as follows:

Food poisoning	..	..	..	..	..	..	347
Dysentery	..	..	..	..	..	..	81
Smallpox contacts							
(surveillance from infected areas abroad)	..	..					21
Paratyphoid and Typhoid fevers	..	..	..	..			38
Malaria	..	..	..	..	..	..	2
Salmonella organisms (re routine sampling)	..	..					114
Cholera	..	..	..	..	..	..	553
Children's and Welfare Homes	..	..	..	..	..	..	10
Miscellaneous	..	..	..	..	..	..	29

Verminous Premises, etc.

Verminous premises – inspections re –							
Bed Bugs	..	..	..	..	..	..	209
Cockroaches	..	..	..	..	..	..	81
Fleas	..	..	..	..	..	..	77
Ants	..	..	..	..	..	..	47
Flies	..	..	..	..	..	..	26
Spider Beetles	..	..	..	..	..	..	13
Carpet Beetles	..	..	..	..	..	..	12
Clover Mites	..	..	..	..	..	..	5
Wood Lice	..	..	..	..	..	..	13
Woodworm	..	..	..	..	..	..	9
Book Lice	..	..	..	..	..	..	2
Bird Lice	..	..	..	..	..	..	2

House Mite	..	..	..	..	..	..	4
Wharfborers	..	..	..	..	..	..	2
Mosquitoes	..	..	..	..	..	..	13
Scabies	..	..	..	..	..	..	7
Pediculosis	..	..	..	..	..	..	17
Miscellaneous	..	..	..	..	..	..	20
TOTAL							559

Care of the Aged, etc.

Where cases of aged or other persons living in bad conditions come to the notice of the department, they are referred to a senior specialist public health inspector who includes in his duties the responsibility for liaison with others interested – medical officers, health visitors, welfare officers, social workers and voluntary organisations. The problems associated with the rehabilitation of these cases are so complex that invariably many organisations and officers are involved.

Ninety-eight visits were made in connection with aged and other persons.

Rhymney River Survey

This survey, which was commenced in 1970, was initiated to investigate the bacterial flora present in the Rhymney River. Samples were again taken at selected points along the course of the river extending from Newport Road bridge up stream to the Ystradfydwg and Ponty sewer bridge. Samples of silt were taken from the river bank in addition to bacteriological water samples.

Of the eleven samples taken three were found to contain salmonella organisms – one sample containing two serotypes. The serotypes were: *S. uirchow*, *S. agona* (two isolations) and *S. saint paul*.

CARAVANS

Licensed Sites

There are now four authorised sites within the city. Three of these are private residential sites, the fourth is a holiday site owned and administered by the Corporation, ideally situated for tourists in Pontcanna Fields, a few minutes from the city centre. The holiday site was used during the season by approximately 1,800 caravans totalling 6,112 caravan nights, a substantial increase on previous years. Several caravan rallies used the site, and changing rooms were made available to the visitors in addition to the normal site facilities.

One of the private sites is a single caravan occupied by an agricultural worker. Another, the Cambrian Trailer Park at Culverhouse Cross is a well run site accommodating 135 caravans.

The remaining authorised site was granted a licence in January following an appeal to the Ministry of Housing and Local Government, which resulted in the owner being given indefinite planning permission. The owner has failed, up to the present, to carry out the conditions attached to the site licence and it will now be incumbent upon the Corporation to embark on the necessary procedure to withdraw the licence if the position does not improve. This site has been a problem for the past ten years, and despite numerous prosecutions both for lack of a site licence, and failure to comply with site licence conditions culminating in the withdrawal of the site licence from the previous owner, it would appear that the unsatisfactory conditions on the site can continue indefinitely under the present legal position.

Unlicensed sites

I reported last year that one large gypsy site on private ground adjoining Penarth Road had defeated the efforts of the department to shift the occupiers, or to substantially improve the sanitary habits of the gypsies and conditions on the site. The story, unfortunately, still holds true despite persistent visits. Some of the gypsies are co-operative and do clean up scrap and other rubbish, but the majority are impervious to any form of approach.

Six eviction operations were carried out to remove gypsies from Corporation owned land. These were all from open sites following slum clearance.

No decision concerning the provision of a permanent site for gypsies has been made by the City Council, there is strong opposition to the site proposed, but it is obvious that a site must be provided eventually to meet the urgent need.

Two hundred and twenty-six visits were made to licensed and unlicensed sites.

Lodging houses

Ten applications were received from keepers of seamen's lodging houses for renewal of their annual licences. Frequent inspections were made to ensure that the high standards were maintained.

Keeping of animals and pet shops

Fourteen applications were received during the year. In each case an inspection was made and all the applications were approved.

Knackers yard and offensive trades

There is one knackers yard in the city subject to an annual licence. One offensive trade is carried out at premises carrying on the business of tripe boilers. Twenty-three visits during the year were made and the premises were found to be satisfactory on each occasion.

Pharmacy and poisons Act

Licences were renewed in respect of 75 premises and 3 licences were issued to new premises.

Hairdressers

Three applications for registration under the Cardiff Corporation Act 1961, were received during the year. 305 premises are now registered and regular inspections were made to ensure that the provisions of the By-laws were complied with.

Rag Flock and other Filling Materials Act 1951 and Regulations 1961-1971

In November, 1971, the earlier regulations viz. 1961-1965 were revoked and new regulations became operative. The new regulations applied control to additional materials and prescribed the analysis appropriate to those materials.

Two samples, one of cotton felt and one of rag flock were submitted for examination. Both samples were found to conform to the standard prescribed.

Fertilisers and Feeding Stuffs Act 1926

Number of samples submitted for analysis	Results of Examination		
	Analysis		
	Satisfactory	Unsatisfactory	Other Irregularities
Fertilisers 6	6	—	—
Feeding stuffs 34	31	2	1

Two samples of feeding stuffs were reported as being of irregular composition. In one case the amount of protein contained was 0.9 units below the lower limit of variation. The manufacturers were warned and instructed to ensure that in future all products were compounded in accordance with their formulation and statutory statements. Follow-up samples were satisfactory.

The second case, an informal sample of rabbit pellets carrying a declaration claiming the presence of a coccidiostat at a declared level, on analysis it was found that the product was deficient of coccidiostat to the extent of 25 p.p.m. below the lower limit of variation permitted in products which are subject to regulation. The sample was taken as a research exercise to ascertain the standard currently prevailing in animal foods which are not subject to regulation but which may be considered for inclusion in future regulations. Since rabbit production on the broiler house basis may well develop it would appear desirable that this type of feeding stuff be subjected to the same controls as those prescribed for foods for other animals. The deficiency was referred to the manufacturers who agreed that in future steps would be taken to ensure that the product should contain the declared amount of coccidiostat.

One sample was found to contain 0.6% of magnesium which was not declared. The words 'CAL MAG' were printed on the sack container but no detail of the magnesium content of the product was included in the statutory statement on the sack tally. The statutory statement was, therefore, incomplete. The manufacturers stated that the product was made in limited batches to serve a local need where magnesium deficiencies were lower than normally encountered in other parts of the country and that the magnesium content was, therefore, only marginally above the level at which no declaration is required (0.5%). The manufacturers agreed that future production should carry a complete statutory declaration.

Public conveniences

Of the 54 unattended conveniences maintained by the City Engineer and Surveyor's department four have been demolished during the year on the grounds of obsolescence and being subject to excessive vandalism.

Fifty-one inspections were carried out and nine references were made concerning defects.

Places of Public Entertainment

Visits cinemas, theatres	9
Visits outdoor entertainment	1
Others	5
Notices served, reference made	1

Health Education

In addition to the daily routine work on food hygiene especially with immigrant employees in catering establishments talks were given to student health visitors and midwives, young wives clubs, old age pensioners, domestic science students, school meals service staff, school children and youth clubs.

Notices requesting the public not to bring dogs into food shops were again circulated to shop managers, the public seems to be becoming more aware of this problem. A Central Council for Health Education leaflet '10 point codes for Food Trade Workers' accompanies all notices and letters sent out by the department concerning Food Hygiene Regulations contraventions.

New Buildings and Alterations

By arrangement with the City Engineer and Surveyor plans submitted for building regulation approval are examined by the public health inspectorate in relation to the requirements of the Food Hygiene Regulations, Factories Act, the Offices, Shops and Railway Premises Act, etc.

Recommendations were made in respect of 517 plans.

FOOD AND DRUGS CONTROL

Food Inspection

Inspection and condemnation of food at the shops and warehouses, etc. in the area is carried out by each district public health inspector. A total of 865 visits was reached for this purpose during the year, and the approximate weight of diseased or unsound food surrendered as unfit for human consumption was 19 tons 4 cwts.

Food inspection and sampling:

Condemnation visits	..	..	..	..	..	865
Routine visits including sampling	..	..	..	..	..	4,672
						<hr/> 5,537 <hr/>

Poultry Inspection

1. Number of poultry processing premises within the district 1
2. Number of visits to these premises 104
3. Total number of birds processed during the year .. 10,000
4. Types of birds processed Hens and roasters
5. Percentage of birds rejected as unfit for human consumption 0.55%
6. Weight of birds rejected as unfit for human consumption 170 lbs.
7. Comments on poultry hygiene and inspection .. Kosher premises partly mechanised, good standard of hygiene although the premises is not purpose built and is to be demolished in the near future.

Imported Food Regulations 1968: Containerisation

983 routine food inspections were made by the district inspectorate in connection with the inspection of container consignments, a reduction of 229 visits on last year. Arrangements for inspection are working smoothly but there would appear to have been a considerable all-round reduction in the volume of containers arriving uninspected. Five to ten per cent inspections were made in the majority of consignments; complete consignments were inspected in a number of instances. Little condemnation was found necessary. It will be noted from the second table that the main form of transport is now by road, only consignments from Fishguard in the main arrive by rail. Table 1 gives the main ports from which consignments arrive.

Table 1

Port	Irish beef qrs.	Irish pigs	Irish lambs	Irish bacon sides	Cases Irish beef	Danish bacon sides	Polish bacon sides	Swedish bacon sides	Cases South Ameri- can beef	New Zealand lambs	Cases New Zealand beef	Aust- ralian lambs	French beef qrs.	Cases French beef
Preston ..	3,831	577	300	788	476	—	—	—	270	—	—	—	—	—
Liverpool ..	2,464	230	—	80	487	—	—	—	106	—	—	—	—	—
Avonmouth ..	195	50	—	—	492	—	—	—	—	1,133	—	—	—	—
Bristol ..	98	55	—	—	—	—	—	—	—	—	—	—	—	—
London ..	258	—	—	—	340	1,460	1,160	2,064	4,270	300	148	328	1,067	230
Cardiff ..	—	100	—	—	—	—	—	—	—	13,048	—	—	—	—
Grimsby ..	—	—	—	—	—	102,920	—	—	—	—	—	—	—	—
Stranraer ..	446	—	—	—	239	—	—	—	—	—	—	—	—	—
Holyhead ..	656	—	—	—	297	—	—	—	—	—	—	—	—	—
Hull ..	—	—	—	—	—	1,620	—	—	—	—	—	—	—	—
Swansea ..	—	734	—	—	—	—	—	—	—	—	—	—	—	—
Newport ..	7,106	6,002	2,509	—	2,738	382	—	—	132	—	—	—	—	—
Manchester ..	116	—	—	—	—	—	—	—	—	—	—	—	—	—
Harwich ..	—	—	—	—	—	3,512	—	60	—	—	—	—	—	—
Fishguard ..	2,609	326	90	27,680	663	—	—	—	—	—	—	—	—	—
Newhaven ..	—	—	—	—	—	—	—	—	—	—	—	—	135	—
TOTAL ..	17,779	8,074	2,899	28,548	5,732	109,894	1,160	2,124	4,778	14,481	148	328	1,202	230

Table 2

Method of Transport

	Road	Rail	Total
Irish Beef qrs.	15,115 qrs.	2,664 qrs.	17,779
Irish pigs	7,748	326	8,074
Irish lambs	2,809	90	2,899
Irish bacon sides	868	27,680	28,548
Cases Irish beef	5,069	663	5,732
Danish bacon	108,374	1,520	109,894
Polish bacon	1,160	—	1,160
Swedish bacon	2,124	—	2,124
Cases South American beef	4,778	—	4,778
New Zealand lambs	14,481	—	14,481
Cases New Zealand beef	148	—	148
Australian lambs	328	—	328
French beef qrs.	1,202	—	1,202
French beef qrs.	230	—	230

In addition to the carcase meat the following consignments of offal, meat joints, chickens, dairy produce and tinned goods were examined.

Cartons Irish cheese	127,509
Irish pork legs	705
Boxes Irish chickens	1,806
Irish gammons	950
Irish beef shanks	187
Irish silversides	200
Cartons Irish offal	573
Cartons Irish macedoine	27,200
Tins Irish lambs' hearts	7
Road containers Irish tinned steak	2
Irish pork legs	705
Cartons Irish corned beef	250
Cartons New Zealand lambs' kidneys	2,130
Boxes New Zealand cheese	12,269
Boxes New Zealand bovine kidney	50
Boxes New Zealand bovine offal	199
Tins New Zealand lambs' tongues	64
Tins New Zealand sheep's livers	360
Tins New Zealand lambs' kidneys	2,130
Boxes New Zealand lambs' legs	300
Boxes Australian sheep's hearts	152
Tins Australian bovine livers	123
Tins Australian lambs' livers	193
Tins Australian bovine hearts	10
Tins Australian bovine offal	632
Tins Australian pigs' kidneys	50
Argentine beef legs	500
Argentine silversides	112
Argentine chuck and blades	528
Argentine beef rumps	80
Cartons U.S.A. pigs' kidneys	480
Cartons Italian tinned goods	1,069
Cartons Italian tinned tomatoes	3,000
Cartons Spanish tomatoes	980
Cartons Dutch chicken meat	100
Cases Danish chickens	40
Cartons Canadian butter	540

Food Hygiene

10,331 visits were made to food premises during the year for the purposes of food hygiene inspection, 739 visits less, unfortunately, than in 1970. This was due to the employment of district inspectors in assisting the housing section to carry out a Cardiff-wide house condition survey. However, it will be seen that a reasonably satisfactory number of inspections were made to premises which are at greatest risk.

A full-time food hygiene specialist public health inspector was appointed in September. It is anticipated that his efforts will do much to raise standards of food premises, especially in the city centre.

<i>Class of premises</i>	<i>Number of premises</i>	<i>Number of food hygiene inspections</i>
Cafes, restaurants, etc.	207	1,150
School canteens	117	277
Other canteens	122	313
Clubs, hotels, public houses	326	961
Butchers, meat preparing premises	215	810
Bakehouses	39	181
Confectioners	289	835
Fried fish shops	75	294
Wet fish shops	42	95
General shops	794	2,742
Wholesale depots	79	239
Ice-cream premises	664	1,263
Markets	3	83
Dairies	20	64
Milk shops	401	645
Vehicles	63	161
Other food premises	105	218
TOTAL ..	3,561	10,331

917 written and verbal notices were served on occupiers of food premises for contraventions of the Food Hygiene Regulations. Details of the action necessary to remedy contraventions which were notified in writing are as follows:

Food Premises

Food to be protected from dust, flies, etc.	154
Food to be protected from customers, etc.	122
Food to be protected from risk of contamination by animals	78
Clean overalls to be provided	13
Smoking to be discontinued	58
Use of unclean wrapping to cease	7
Sanitary conditions to be modified, cleansed, repaired	256
Wash hand notices to be provided	64
Provision of water supply (cold)	17
Provision of wash hand basins	52
Provision of hot water for wash hand basins	88
Provision of soap, towel, nailbrush, etc.	107
Provision of sinks for food or equipment	49
Provision of hot water for sinks	30
Provision of first aid equipment	56
Provision of clothing accommodation	23
Lighting of food rooms to be improved	9
Ventilation of food rooms to be improved	27

Food rooms to be cleaned/repaired..	..	..	..	414
Refuse to be removed ..	..	..	..	224
Cold storage for special foods ..	..	..	..	35
Hot storage for special foods ..	..	..	..	4

Food Stalls, vehicles

Name, address to be exhibited ..	..	..	..	21
Improvements to structure, repair, cleanliness ..	..	..	..	17
Screening to be provided ..	..	..	..	4
Refuse storage to be improved ..	..	..	..	5
Water supply, washing facilities to be provided ..	..	..	..	16
Soap, towel, nailbrush, etc., to be provided ..	..	..	..	23
Overclothing to be provided ..	..	..	..	8

BACTERIOLOGY OF FOODSTUFFS

Milk Bacteriology

Heat-treated milk

Heat treatment of milk is now carried out at three processing plants in the city; pasteurisation by the H.T.S.T. method at two plants, and U.H.T. at one ultra-heat treatment plant.

Samples of raw and heat-treated milks were submitted for examination to the Public Health Laboratory. Samples were collected at the milk processing plants, wholesale and retail dairies, and milk vending machines, etc. Details of the number and designations of the various samples and laboratory reports are tabulated under the appropriate tables. 782 heat-treated milks were submitted to the statutory tests. All samples submitted to the phosphatase test for effective pasteurisation were reported as satisfying the test. 48 samples out of the total of 435 samples of pasteurised milk submitted to the methylene blue test (for hygiene and keeping quality) were reported as unsatisfactory. 24 of these samples were from the same processing plant which is situated outside the city. The licensing authority responsible for plant supervision and dairy management were informed. Following their investigations an improvement was noted and is being maintained. In all other cases the processors were informed and follow-up samples were satisfactory. All 36 samples of sterilised milk were reported as satisfying the turbidity test, and therefore, satisfactorily processed. 311 samples of milk treated by the U.H.T. process were submitted to the colony count test, 19 were reported as failing to satisfy the test. Investigations were carried out at the plant and further samples were satisfactory.

Raw milk

Of 48 samples of untreated milk examined at the Public Health Laboratory 20 were submitted to the methylene blue test. 9 of these samples were reported as failing to satisfy the test. The failures were from two sources – 8 from one farm. In this case the results were discussed with the producer and passed to the Milk Advisory Officer, whose co-operation at farm level secured a temporary improvement in the bacteriological quality of the milk. This was not maintained and the producer ceased retail sales, the whole of the production being submitted to heat treatment. In the other case follow-up samples were satisfactory. 26 samples of untreated milk examined as part of an investigation of human salmonella infection gave negative reports.

All samples of C.I. untreated milk submitted to the methylene blue test were satisfactory. 15 samples of untreated (ordinary) and two samples of C.I. untreated milk were submitted to the ring test for brucella abortus. Of these only 3 samples of untreated (ordinary) milk gave positive results, these were found to be negative on culture. 7 samples of untreated milk and 2 samples of C.I. untreated milk examined biologically gave negative results in respect of brucella abortus and tubercle bacilli. Premature guinea pig deaths occurred in 3 cases. Follow-up samples gave negative results.

Milk submitted for laboratory examination during 1971

Heat-treated milk

Designation	Total number of samples submitted for examination	Phosphatase test		Methylene blue test		Turbidity test		Colony count	
		Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory
Pasturised	263(3)*	263(3)*	—	242(3)*	18(—)*	—	—	—	—
Homogenised pasteurised	75	75	—	67	8	—	—	—	—
Channel Islands pasteurised	97	97	—	75	22	—	—	—	—
Ultra-heat treated ..	311	—	—	—	—	—	—	292	19
Sterilised ..	36	—	—	—	—	36	—	—	—

*These figures include the number of samples taken from milk vending machines, the figures indicating the milk vending machines are shown in brackets.

Antibiotics in ex-Farm milk

A total of 199 samples of raw milk submitted for chemical analysis were tested for the presence of penicillin and other antibiotic residues. Of these 3 samples (two from the same producer) were reported as containing 0.1 i.u. of penicillin. Investigation showed that the producers failed to discard the milk from cows under treatment. Warnings were given: subsequent samples were free from antibiotics.

Salmonella organisms in food

Out of the 76 cases of food poisoning which were notified in 1971, seventy cases were caused by salmonella organisms. For a number of years the department has, with the co-operation of the Public Health Laboratory Service, investigated the incidence of salmonella organisms in abattoirs, butchers, markets, etc., and the results of these investigations have been included in Annual Reports for a number of years.

In 1971 a survey was carried out to ascertain the incidence of salmonella in dried milk powder. Apart from its extensive use as a baby food, dried milk is increasingly used in hot drinks. A considerable amount of research has been carried out in the United States of America in relation to the thermal resistance of salmonellae isolated from dry milk, and there have been outbreaks of salmonella food poisoning in the United States of America in which non-fat dried milk has been the vehicle of infection.

In Cardiff at the end of 1970 one case of salmonella food poisoning was doubtfully linked with dried milk powder.

Twenty-four samples were submitted for bacteriological examination. No salmonellae were isolated.

Salmonella organisms in poultry

The investigation commenced in 1971 into the association between poultry and salmonellosis in humans has continued. During the year 49 'samples' were taken, each consisting of approximately 25 heads. These were mainly from chickens, but also included a small number of ducks and turkeys.

Raw milk

Milk Designation and Specific Description	Total number of samples submitted to laboratory	Number of samples submitted for examination				Salmonella		Methylene Blue Test		Brucella Abortus				Biological examination		
		Methylene blue test	Brucella abortus	Biological	Salmonella	Pos.	Neg.	Sat.	Unsat.	Ring Test		Culture Test		Tubercle Bacilli	Brucella Abortus	
										Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Neg.
Untreated ..	48	20	15	10*	26	—	26	11	9	3	12	—	3	—	7	7
C.I. Untreated	2	2	2	2	—	—	—	—	2	—	2	—	—	—	2	2

*Including three guinea pig deaths. Samples repeated results negative.

A representative portion was taken from each sample after the heads had been minced and mixed at the laboratory.

The laboratory results were as follows:

Samples examined	..	..	..	..	..	..	49
Samples found to be negative	..	..	..	..	..	..	44
Samples from which one or more salmonella serotypes were isolated	..	..	..	..	..	..	5
Number of isolations of							
<i>S. panama</i>	..	..	..	..	..	..	2
<i>S. saint paul</i>	..	..	..	..	..	..	1
<i>S. cubana</i>	..	..	..	..	..	..	1
<i>S. indiana</i>	..	..	..	..	..	..	1

Moore's swabs were also placed in an inspection chamber at the same poultry slaughter-house at a convenient point in the drainage system to sample effluent from sinks used for equipment washing and staff water closets.

The results of these samples are as follows:

Swabs examined	..	..	..	..	..	..	33
Swabs found to be negative	..	..	..	..	..	..	25
Swabs which one or more salmonella serotypes were isolated	..	..	..	..	..	..	8
Number of isolations of							
<i>S. dublin</i>	..	..	..	..	..	..	6
<i>A. agona</i>	..	..	..	..	..	..	2

Liquid Egg

Twenty-three samples were taken from several Cardiff bakeries and submitted to the City Analyst. All samples passed the alpha-amylase test.

Cream

Twenty samples of cream were taken for bacteriological examination from packers and a confectionery baker as a routine check on the prevailing bacteriological standard. The samples were taken from churns as received, after whipping and from the savoy bags.

The number of organisms found ranged at first from 20 per ml. to 1,000,000 per ml. but no brucella abortus or other pathogens were isolated. The factory management were informed and cleansing routines were tightened resulting in considerable improvement on follow-up samples.

One packer also was required to improve his methods of handling and sterilisation following a poor bacteriological sample. No further samples were necessary since he ceased to pack cream.

Ice-cream and Ice-cream Premises

There are three premises registered for the manufacture of ice-cream producing a hot mix and two using a complete cold mix powder. The number of retailers registered for the sale of ice-cream is 656.

During the year 1,263 visits were made to premises at which ice-cream was manufactured or sold. 120 samples were submitted for bacteriological examination, details of which are given in the table following. The unsatisfactory samples were found to be due mainly, as usual, to poor sterilisation techniques or handling equipment by the retailer. Advice was given and follow-up samples proved satisfactory.

Total number of samples submitted for examination	Samples from local manufacturers		Samples from National concerns	Satisfactory		Unsatisfactory	
	Hot mix	Cold mix		Grade I	Grade II	Grade III	Grade IV
120	57	6	57	100	7	7	6

Consumer Complaints of Food Abnormalities

During 1971 the number of complaints about articles of food showed a decrease of 5.6% on the total received in 1970.

Some 132 items were investigated following reference by members of the public. The following will serve to indicate the nature of the complaints and the scope of investigations undertaken.

<i>Product</i>	<i>Number of complaints</i>						
Milk	6
Butter	1
Cheese	2
Bread	17
Canned meat	9
Processed meats and bacon	16
Fresh meat	1
Sausages	4
Meat pies and pasties	21
Fish	3
Fresh fruit	1
Canned fruit	2
Flour confectionery	16
Sugar confectionery and Chocolate	8
Canned vegetables	4
Other food	21
TOTAL							132

Chocolate and chocolate products containing larvae and not of merchantable quality

Larvae were present in chocolate, flake chocolate bars and liqueur chocolate, a spider weevil in an Easter egg, and a piece of wire in a chocolate confection. In three cases investigations showed that considerable periods of time had elapsed between the purchasing of the products and reporting to the department, stock rotation methods at wholesale and retail premises were generally not as efficient as they should be.

In the case where a piece of wire was found in a chocolate confection its origin was not ascertained. All cases were considered by the Health Committee, warnings and advice were given concerning unsatisfactory stock control and legal proceedings taken in one case when a fine of £30 and £10 costs were imposed.

Sponge cake containing moth in cream centre

An imported product contained a moth embedded in the central cream layer of the cake, investigation showed that every reasonable precaution was taken at the factory. The Health Committee resolved that a warning be issued to the manufacturer.

Tomato sandwich showing mould contamination

The alleged mould growth on the sandwich filling was found to be a portion of tomato stalk. No action was taken.

Yogurt showing mould contamination and containing pieces of wood

One case where a carton of yogurt showed mould growth was found to be the result of faulty stock control. The two slivers of wood found in another carton had entered along with the fruit contained in the product. Both cases were reported to the Health Committee and warnings were given to the manufacturer and retailer in the case where mould was present and where the wood was found, the manufacturers were instructed to scrutinise all fruit before adding it to the final mix.

Tinned carrots completely decomposed

A can containing carrots where the contents were decomposed, was found to be defective to the extent of having a hole approximately half inch in diameter near the rim of the can. Further cans in an unsatisfactory condition were found at the retail premises. Damage in transit and ineffective inspection by the retailer were the reason for the defective condition and sale of the cans. A warning was given and all stocks which were unfit for food were surrendered for destruction.

Flour confectionery showing unfitness and containing foreign bodies

The presence of mould in and on the surface of fruit pies and other cakes was the predominant cause for complaint. Faulty stock rotation and failure to observe coding when applied were the reasons for the omissions. Where a piece of wood was present in a cake no similar material was traced at the bakery. All cases were reported to the Health Committee, warnings were given and advice on effective stock rotation given to the retailers and manufacturers concerned. Legal proceedings were taken in one case, a fine of £20 was imposed and £10 costs awarded.

Frozen beans with abnormal odour – Chicken casserole frozen meal with sour smell

Investigation showed that the packet of frozen beans had probably been stored above the effective load line in the display cabinet at the retail premises, been refrozen and subsequently defrosted for use – the retailer was advised on correct handling of frozen foods and a warning issued.

The chicken casserole meal also appeared to have been incorrectly stored and had deteriorated on refreezing and subsequent thawing – a warning was issued and advice given.

Canned tomatoes containing a snail

The can of tomatoes contained a snail which had been processed along with the contents of the can. Investigations showed that although all reasonable precautions had been taken at the factory to cleanse and screen the tomatoes the snail remained attached to the fruit. A warning was given to the packers on the instruction of the Health Committee.

Chips containing wire

Chips served as part of a meal at a cafe contained a piece of wire – inspection of the kitchens and preparation area did not show the presence of any similar material – the matter was referred to the Health Committee, a warning was given and the cafe proprietor was instructed to ensure that all preparation surfaces were free from all foreign materials.

Cider not of quality demanded

Cider purchased from an off-licence store was alleged not to be of satisfactory compositional quality. A sample of the product was obtained and compared with that provided by the complainant. The samples were of similar and satisfactory compositional quality. It was merely not to the 'Taste' of the complainant.

Canned curry meal containing the thorax of a bee

The thorax of the bee had been processed along with the contents of the can and no satisfactory reason for its presence was found. The manufacturer appeared to take every reasonable precaution at the factory to prevent incidents of this nature, including the provision of electric insect exterminators at the can filling points at the plant. A warning was given on the instructions of the Health Committee and the manufacturer was instructed to increase the efficiency of the precautions currently operating at the plant.

Trade Descriptions Act 1968

The operation of the Act and the publicity which continues to surround the reports of the numerous lobbyists focuses the consumers' thoughts on the desirability for energetic enforcement of quality control of foods at administrative level. This trend continues to be reflected by the number of consumer complaints received regarding food-stuffs during the year, details of which are included under the heading of 'Consumer Complaints'.

The revocation of the orders which were made under the Merchandise Marks Act as from November 1971, is viewed by a considerable body of opinion as a retrograde step. The introduction of regulations in a modified form requesting the application of an indication of country of origin to all imported food products would assist the enforcing authorities in carrying out their functions and go a long way to satisfying the housewife regarding the origin of these products.

The department carried out inspections and observations of labelling and description of all foods as part of its normal routine duty. Local food packers are advised regarding the descriptions applied to their products and the format of their labels. Where the infringements of the orders were found to have occurred, warnings were given in all except one case where legal proceedings were instituted in respect of the alleged mis-description of oranges. The retailer was found guilty but granted an absolute discharge.

Legal Proceedings: Food Complaints and Sampling

Defendant No.	Offence	Fines	Costs	Total Penalties
16 (Baker)	Did not take all such steps as may be reasonably necessary to protect the food from risk of contamination in that the yard fresh bread was stacked in trays unprotected contrary to Regulations 9 and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955 ..			
Ditto	Did not keep clean equipment in the bakehouse, namely cake trays, metal bowls, scrapers, whisks, mixing bowls and their motor casings with which food came into contact or was liable to come into contact were not kept clean contrary to Regulations 7 and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955... ..			
Ditto	Did fail to keep clean the store room and the bakehouse where food was exposed to the risk of contamination contrary to Regulations 6 and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955			
Ditto	Did fail to keep clean the ceiling, walls, floor and fixtures and fittings in the bakehouse and the store room, contrary to Regulations 25 and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955.			

Legal Proceedings: Food Complaints and Sampling—cont.

Defendant No.	Offence	Fines	Costs	Total Penalties
16 (Baker)	Did fail to keep clean the working surfaces, namely two tables with which food came into contact or was likely to come into contact were not of such material so as to enable them to be thoroughly cleaned, contrary to Regulations 7 and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955			
Ditto	Did fail to keep clean and in good working condition the wash hand basin provided for the use of persons engaged in the handling of food, contrary to Regulations 18 (4) and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955.			
Ditto	Did fail where the water closet pan was dirty, the sanitary convenience was not suitably and sufficiently lighted either naturally or artificially and a prescribed notice requesting users to wash their hands after using the convenience was not affixed, contrary to Regulations 16 and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955 ..			
Ditto	Did fail to provide suitable and sufficient accommodation for outdoor or other clothing and footwear, contrary to Regulations 20 and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955.			
Ditto	Did fail to provide suitable and sufficient means of ventilation, contrary to Regulations 23 and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955			
Ditto	Did fail to provide where open food was handled sufficient sinks for washing equipment and food and the one sink which was not kept clean and in good working condition, contrary to Regulations 21 and 29 of the Food Hygiene (General) Regulations 1970 made under Section 13 of the Food and Drugs Act 1955			

Milk and milk bottles

The number of complaints in respect of unsatisfactory compositional quality of milk and of improperly cleansed milk bottles, bottled milk containing foreign bodies and extraneous matter was 6, this figure again showed a substantial decrease on the previous year and is most heartening. It is hoped this trend will continue. All complaints were investigated at the various stages of production, handling and distribution and reported to the Health Committee. Warnings were given as directed and the processors advised on preventive measures to be adopted at their dairies. Complaints regarding the compositional quality of milk investigated were found to be not substantiated.

Meat pies and pasties

Twenty-one complaints involving pies, pasties and similar products were investigated. Mould, the ever present problem experienced in regard to these products was again evident, in varying degrees of intensity and development.

Foreign bodies encountered included 5 cases where pieces of fur-like material and skin identified as portions of bovine hide were found, all undoubtedly introduced as part of the filling of the pies. One case where a plastic disc, probably the lid of an additive container was found in a pie and pointed to lack of care in the preparations of the ingredient. In accordance with the usual departmental procedure all cases were considered by the Health Committee. Warnings were given as directed and legal proceedings taken in one case, a fine of £15 was imposed. Advice and guidance on stock rotation and control was given in all cases as a routine measure.

Bread

Some 17 cases were recorded and investigated during 1971, a 15% decrease over the previous year. Mould, edible oil, a piece of string from an oven glove, flour beetles, portions of charred dough, wheat starch and compressed cardboard were among the reasons for complaint.

The foreign bodies found indicate lack of supervision of production procedures, inefficient control of ingredients and hygiene at the bakeries.

After investigation and consideration, warnings were given, with special emphasis on the more serious incidents. Advice and guidance was also provided as routine.

Sausages

Four incidents including mould and decomposition in sausages were recorded, investigations again showed that inefficient stock rotation and control brought about these conditions. Every effort is being made to advise retailers and wholesalers alike that stock rotation must be strictly enforced. After consideration by the Health Committee warnings were issued and advice given.

Trace metals in molluscs and crustacea

Following the reporting in the United States of America of the presence of mercury in crab meat an investigation was carried out by the department, the City Analyst working as a member of a team covering South Wales and the West of England. Samples submitted from the City showed that mercury levels were below the limit considered to be 'a safe level or a guide line' by the Canadian and United States of America authorities.

Lead, copper, arsenic, cadmium and zinc determinations were also made. Cadmium levels in crab meat were such that further investigations were considered desirable though little is known regarding its effect if any on health or even if at the levels presently encountered it constitutes a health hazard. Further work is being done in this field and results are submitted to the Ministry of Agriculture, Fisheries and Food for inclusion in that department's study and correlation of material currently available in this sphere of investigation, since no recommendations as to a safe level appears to have been laid down for this element.

Results show that molluscs, crustacea and fish products contained the different trace metals within the following ranges.

Cadmium – Nil in frozen crab meat, prawns, frozen tiger prawns to 6.7 p.p.m. in dressed crab.

Mercury – 0.03 p.p.m. in crab paste and fresh water prawn to 0.22 p.p.m. in canned tuna.

Copper – 0.1 p.p.m. in salmon spread to 17.8 p.p.m. crab spread.

Arsenic – Nil in prawn canned in brine, frozen tiger prawns, crab meat and lobster p \hat{a} te to 2.4 p.p.m. in fresh crab.

Zinc – 8 p.p.m. in frozen prawns and salmon spread to 58 p.p.m. in 'mussels in brine'.

Lead – 0.1 p.p.m. in salmon and crab spreads, dressed crab and fresh water prawns to 1.3 p.p.m. in mussels in brine.

With the exception of the zinc in mussels in brine 58 p.p.m. (50 p.p.m.) and arsenic in dressed crab 2.4 p.p.m. (1 p.p.m.), the metal content of the products was within the various recommended limits. The larger quantities of zinc and arsenic in the mussels and dressed crab respectively were regarded as being naturally present, and whilst perhaps being cause for some concern, were not unduly excessive quantities. Further investigations are proceeding as routine monitoring of fish and shell fish products.

Food and Drugs sampling: irregularities of composition

During 1971 a total of 1,278 samples were investigated. Of these, some 54 were in respect of labelling and were dealt with without reference to laboratory examination. The remainder comprised 433 samples of ordinary milk, 52 samples of Channel Islands milk and 793 foods and drugs (other than milk).

The extent of the irregularities is detailed in the table which appears below and subsequently discussed.

**Samples submitted for analysis to the Public Analyst and examined
for compliance with the Labelling of Food Order at the Departmental Offices**

Nature of Sample	No. of samples taken	Compositional quality and/or labelling satisfactory	Adulterations or irregularity of composition	Labelling irregularities
Milk – ordinary	433	407	26	—
Milk – Channel Islands ..	52	46	6	—
Other foods	793	743	42	8
Samples examined at Departmental Offices for labelling only	54	45	—	9
TOTALS	1,332	1,241	74	17

In addition, 88 miscellaneous foods and milk were submitted for laboratory examination as part of the investigation of consumers' complaints in respect of food.

Milk

Of the 485 samples of milk submitted for analysis, 433 were samples of ordinary milk and 52 Channel Islands milk.

Of 433 samples of ordinary milk 26 were reported as adulterated or of irregular composition, though not in all cases did the sample irregularity denote irregularity of the consignment. In the case of Channel Islands milk 6 samples were reported as failing to satisfy the statutory standard.

- (1) Fifteen samples of ordinary milk from 10 consignments comprising 747 gallons were deficient in milk fat. Though the samples from individual churns were of irregular composition the consignments complied with the presumptive fat standard.
- (2) Two samples of ordinary milk from a 5 churn consignment comprising 41½ gallons were deficient of 13% and 18% fat respectively. The total average fat content of the consignment was 2.98%, therefore, slightly below the presumptive minimum. Follow-up samples complied with the presumptive fat standard.
- (3) Three informal retail samples of heat-treated milk from a processing plant situated in an adjoining county, each contained 3% added water. Extensive investigations were undertaken by the department and the processing company. Incomplete draining

of a bulk storage tank after cleansing appeared to be the cause of the adulteration. Regular monitoring of the milk by the department is a matter of routine and the processors are actively checking the milk at all stages of processing. Further samples taken by the department were satisfactory.

- (4) Three informal samples, a one pint bottle of pasteurised homogenised milk, a one pint bottle and a one-third pint bottle of pasteurised milk from the same retailer each contained 1% added water. The milk was processed at dairies outside the city and the processors were informed and requested to investigate the cause. Although results were inconclusive, further samples taken were satisfactory.
- (5) Three informal samples of churn milk from two different producers in an adjoining county contained not less than 0.1 international units of penicillin. The churns were part of large consignments, the other churns were free from penicillin. Investigations at the farms concerned showed due care had not been taken in securing the exclusion of the milk from cows treated with antibiotics. Both producers were warned and further samples gave satisfactory reports.
- (6) One sample of Channel Islands pasteurised milk contained 2% extraneous water. Investigations at the processing plant were inconclusive, the possibility of failure to ensure that the pipe-lines of the plant had been properly drained after sterilisation seemed to be the most likely cause. Advice was given and further samples were found to be satisfactory.
- (7) One informal retail sample of heat-treated Channel Islands milk was deficient of 7% fat. Four follow-up samples taken at the plant during investigations were deficient of 2% fat in three cases and 10% in the fourth. During the further investigations carried out it became clear that the fat deficiency took place by the failure of the operator to discard a sufficient quantity of ordinary milk in the change-over from processing ordinary milk to Channel Islands milk, and thereby ensure that only Channel Islands milk carried the appropriate description. The management were instructed to ensure that more rigid control should be exercised during the change-over period and thus avoid a recurrence of incidents of this nature.

Standardised Ultra-Heat Treated Milk for the Export Market

The standardisation of ultra-heat treated milk to contain 2% and 3% fat respectively continues at a processing plant in the city. The milk is packed for export chiefly to middle eastern countries. During the year a total of 18 samples of standardised milk were submitted to the laboratory for examination in order to determine whether or not the products contained milk fat in accordance with the declaration as to content made by the company. Sixteen samples complied with the declared fat content. Two declared to contain 3% fat were reported as containing only 2.95%. The manufacturers were informed and adjusted the format of their standardisation to comply with the declaration made.

Butter – of Irregular Compositional Quality

Three cases occurred during the year when samples of butter were shown to be of irregular compositional quality.

In two cases an excess of 0.1% of water was found, and in the third case a salt butter was deficient of butter fat. All samples were from the same processor but different retail outlets.

Since the excessive water content was not serious the matter was discussed with the management of the factory and a full investigation carried out. A series of samples collected during the investigation were of satisfactory quality. In view of this no formal action was undertaken.

The salt butter contained 79.5% butter fat and 3.1% salt. It is known that difficulties exist in processing butters to which 'salt' is added to suit local tastes. Careful formulation is necessary to ensure that the product complies with the Butter Regulations of 1966, and satisfies public demand. The matter was discussed at some length with the factory processing management, and it was agreed that the salt content would be reduced, and the formula adjusted to produce butter of regular compositional quality.

The company was informed that stringent quality control should be enforced at all stages of processing if incidents of this nature were not to recur. Further samples were of satisfactory quality.

Pork Chipolata Sausages containing Excess Preservative

A half pound pack of pork chipolata sausages manufactured by a national concern contained 470 p.p.m. of sulphur dioxide (i.e. 20 p.p.m. in excess of the prescribed maximum of 450 p.p.m. laid down in the Preservative in Food Regulations 1962). Other sausages produced were of satisfactory compositional quality. The excess preservative content of the sample was regarded as an isolated incident, and was probably due to incomplete mixing of the seasoning and preservative, and poor distribution of this mixture. The facts were referred to the manufacturers who undertook to ensure correct mixing of the ingredients and thorough distribution of the preservative within the final product.

Instant Non-Fat Dried Milk – containing an excess of moisture

Instant non-fat milk marketed by a supermarket contained 5.5% of moisture, i.e. 0.5% in excess of the maximum prescribed by the Dried Milk Regulations 1965. Investigations as to the reason for the excess gave inconclusive results. Further samples were satisfactory.

Whole Lemon Drinks – deficient of sugar

Six samples of whole lemon drinks (for dilution to taste) were taken as follow-up samples during investigations in respect of a sample taken in the last quarter of 1970, which proved to be deficient of sugar. The samples contained amounts of sugar varying from 14.4% w/v. – 21.5% w/v. The Soft Drinks Regulations 1964 require that soft drinks to be diluted shall contain a minimum of 22½ lb. of sugar per 10 gallons (i.e. 22½% w/v.). In the period following the sampling of the products the company ceased to manufacture soft drinks in the city, all production being centralised as part of reorganisation within the company. Further samples were satisfactory.

Jam – deficient of fruit

Two cases where samples of jam containing 27% of fruit and 28% of fruit respectively were investigated, since the fruit contained in both samples was below the minimum prescribed for the products. The first sample was a raspberry jam produced in a continental country and contained only 27% of fruit. This being below the standard prescribed by the Food Standards Preservatives Order 1953, viz. 30%, three further samples from the same shipment were analysed and found to be of satisfactory quality. The deficiency in the original sample was regarded as an isolated incident and the facts referred to the manufacturers.

Investigations regarding a sample of apple and blackcurrant jam which contained only 28% of fruit, included resampling of the product when three further samples were found to contain a slightly higher fruit content, 32%. Lengthy discussions were undertaken with the manufacturers on the technical aspects of jam production and seasonal variations in fruit. The product was further monitored and found to be of satisfactory compositional quality.

Pies – deficient of meat

Four samples of pies of varied descriptions were deficient of meat, including the following, two steak and kidney pies comprising an informal sample contained only 20% of meat. A further two steak and kidney pies contained only 17% of meat and an individual pie described as a beef steak and kidney pie 18% of meat. All three samples were therefore deficient of meat since the standard prescribed for pies described as meat pies in the Meat Pie and Sausage Regulations 1967 is 25% of meat.

The last case, meat and vegetable pies from a local manufacturer were slightly deficient in meat, the meat content being 12% whereas the standard prescribed by the regulations is 12½%.

In the first case the matter was referred to the manufacturer who amended the description of its products to steak and onion pies and the lower standard of 12½% meat would apply.

Where the pies contained 17% and 18% of meat respectively the manufacturers were informed. The formulation of the products was checked, and the further samples taken were satisfactory.

The meat and vegetable pies slightly deficient of meat were followed up by resampling of the product as a routine measure. Further samples were found to be satisfactory. The deficiencies were however reported to the manufacturer.

Gravy Salt – not of merchantable quality

A sample packet of gravy salt which had become solidified due to long storage was found to be part of the stock of the product held at a retail premises. The gravy salt was found to be not of merchantable quality due to its physical condition. The remainder of the stock was surrendered for destruction, and the management was advised not to over stock items which appear to have only a limited demand, and to exercise a more efficient stock control.

Beetroot in Redcurrant Jelly – not of merchantable quality

A delicatessen type product showing poor colour of the product, and breakdown of the lacquer on the surface of the jar's metal cap proved to be old stock of a line which was not in popular demand. The vendor was advised not to over stock in lines which were a speciality line with a limited demand, and to observe strict stock rotation of stock held. A few jars of the product held at the premises were surrendered for destruction.

Chilli Sauce – irregularity of labelling and containing undeclared ingredients

Chilli Sauce, an Asian product contained maize starch which was undeclared in the list of ingredients on the label, and the preservative propyl-para-hydroxybenzoate. Although a preservative was declared in the list of ingredients, the label did not carry the statutory statement required by the Preservative in Food Regulations 1962. The facts were referred to the manufacturers and it was found that the ingredients were no longer included in the formulation of the product and the label was amended, deleting reference to preservatives.

Canned New Potatoes – containing excess of tin

A can of new potatoes containing 260 p.p.m. of tin. This amount being above the recommended tin content for canned food viz. 250 p.p.m. Further samples from the same source and batch were satisfactory. The facts were discussed with the packers and the unsatisfactory report was deemed to be an isolated incident in a rogue can.

Devilled Ham – deficient of meat

An imported product contained only 63% meat, whereas the standard prescribed by the Fish and Meat Spreadable Products Regulations 1968 requires a meat content of 70%. During investigations, the matter was referred to the manufacturer who had already amended the formulation of the product to enable it to comply with the United Kingdom prescribed standards. The meat deficiency was due to the application of conversion factors of different values in laboratory control of the product in the country of origin from those which are currently accepted in the United Kingdom. The amended formulation and laboratory control based on United Kingdom conversion factors has now been introduced as routine procedure.

Red Currant Jelly – containing non-permitted colouring matter

A sample jar of red currant jelly purchased in the first quarter of the year contained Ponceau MX, an artificial colouring matter which was deleted from the permitted list as from the 1st January 1971 by the Colouring Matter in Food Amendment Regulations of 1970. Investigation showed that the jelly had been held in store for a considerable period and had been produced prior to the introduction of the amended legislation. No further stocks were held at the premises.

Ham and Chicken Roll, Ham and Beef Roll – containing excess sodium nitrate

Nine samples of ham and beef roll and two samples of ham and chicken roll from the same manufacturer contained sodium nitrate in amounts varying from 1,200 p.p.m. – 1,400 p.p.m. This amount being considerably in excess of the maximum permitted by the Preservatives in Food Regulations of 1962, as amended in 1968, viz. 500 p.p.m. The manufacturers were informed and expressed great concern. Following our report all stocks of the product were withdrawn from sale throughout the country.

REPORT OF THE CITY ANALYST FOR 1971

by A. R. Phillips, B.Sc., M.Chem.A., F.R.I.C.

The work covered by this report is chiefly that carried out for the City of Cardiff, a separate annual report being made for the City of Swansea.

The report gives me the opportunity to thank the Health Committee for their kind interest and the Medical Officer of Health, Dr. Anderson for his support, both in matters of staffing and in the purchase of scientific equipment in order to bring the laboratory up to date.

Staff changes at junior level were very marked during the year but in spite of this all members of the staff have pulled their full weight, and have earned my grateful thanks. In particular I wish to thank Mr. McKinlay, Deputy City Analyst, for his boundless enthusiasm in putting new techniques, such as atomic absorption spectrophotometry into active service, to Mr. Sanders, Senior Analyst and to Miss Ball, our secretary who is responsible, single-handed, for all of the clerical work of the laboratory.

The City Analyst's Laboratory continues to provide an analytical service for the City of Cardiff, the City of Swansea, the West Glamorgan Water Board, and also in appropriate cases to private individuals and bodies. The duties covered include those of Public Analyst and Official Agricultural Analyst under various acts and regulations, Analyst for the Port Authorities, and consultant to departments including that of City Engineer & Surveyor, Swansea. The latter department has continued its sampling of trade and sewage effluents and has requested advice on treatment where necessary. Air pollution testing, with particular emphasis on the determination of toxic metal levels, also assumed greater importance during the year.

The following table gives the numbers of samples examined from various sources during the year:

City of Cardiff

Food & Drugs Act	1,278
Milk (Special Designations) Regulations ..	36
Port Health Authority	61
Fertilisers & Feeding Stuffs Act	40
Public Health Department	
Atmospheric Pollution:	
Deposit Gauge Analyses	63
Sulphur Dioxide Determinations	1,942
Smoke Measurements	1,897
Foods	115
Waters	114
Others	65
Baths Department	1
Parks Department	9
City Surveyor's Department	29
Weights & Measures Department	8
From other sources	51
Laboratory Information	3

5,712

City of Swansea

Food & Drugs Act	508	
Public Health Department		
Atmospheric Pollution:		
Deposit Gauge Analyses	29	
Lead Peroxide Candles	29	
Waters	32	
Others	15	
Port Health Authority	5	
Weights & Measures Department		
Fertilisers & Feeding Stuffs Act	42	
Consumer Protection Act	21	
City Engineer's Department	69	
		750
West Glamorgan Water Board		774
		<hr/> 7,236

The corresponding figures for 1970 were: City of Cardiff 5,475, City of Swansea 866 and West Glamorgan Water Board 710; Total 7,051.

FOOD and DRUGS ACT

A total of 1,278 samples were submitted by the Chief Public Health Inspector for the City of Cardiff under this Act during 1971. They comprised 485 milks, 777 foods and 16 drugs of which 82, or 6.4% (32 milks, 48 foods and 2 drugs) were reported as unsatisfactory or irregular.

The following table groups the samples analysed, those reported as unsatisfactory being indicated by the numbers in brackets:

Nature of sample	Number examined	Nature of sample	Number examined
Milk		Meat Products Miscellaneous ..	7
Ordinary	433 (26)	Preserves	42 (7)
Channel Islands	52 (6)	Salad Cream	6
Foods		Sauces, Chutney & Pickles ..	28 (2)
Baby Food	34	Sausage Rolls	3
Butter and Margarine	68 (3)	Sausages	8 (1)
Cheese and Cheese Spread ..	7	Soft Drinks	78 (6)
Cream	14 (1)	Spirits	2
Curry Powder	4	Sugar Confectionery	11
Dessert Powder and Dessert ..	6	Tomato Ketchup etc.	5
Dehydrated Fruit and		Miscellaneous	27
Vegetables	7	Canned	
Dried and Glacé Fruit	11	Cream and Milk	20
Dried Milk	14 (3)	Dessert	3
Flour Confectionery	29 (1)	Fruit and Fruit Juice	34
Flavours and Colours	9	Fish	22 (1)
Fish and Fish Products	9	Meat Products	61 (13)
Fish and Meat Paste	31 (1)	Milk Pudding	8
Fresh Fruit and Vegetables ..	6	Savoury	4
Gravy Mix and Salt	2 (1)	Soft Drinks	4
Herbs and Spices	4	Soup	19 (1)
Ice Cream and Ice Lolly	40 (2)	Tomatoes, Juice and Purée ..	13
Jelly and Jelly Products	12	Vegetables	18 (1)
Lard and Suet	5	Drugs and Medicinal Preparations	16 (2)
Meat Pies	22 (3)		
Meat and Vegetable Pies	20 (1)		
		TOTALS	1,278 (82)

MILK

Of the 433 ordinary milks examined, 6 contained small amounts of added water ranging from 1 to 3%. These samples were pasteurised milks. Seventeen samples showed fat deficiencies ranging from 1 to 30% but in all cases except one the calculated average fat content of the bulked milk would have been above the minimum of 3% required by the Sale of Milk Regulations 1939. In one case the calculated average fat content was 2.98% which was slightly below requirements. Seventy-one or 16% out of a total of 433 had non-fatty solids contents below the 8.5% minimum required by the Sale of Milk Regulations but in all cases the freezing point test was carried out and this showed that they were genuine milks of inferior quality.

Of the 52 Channel Islands milks examined, 46 complied with the requirements of the appropriate regulations. One contained 2% added water and 5 were deficient in fat in amounts ranging from 2 to 10% compared with the 4% legal minimum fat content. A total of 199 raw milks also tested for antibiotic residues included penicillin and 3 of the samples were unsatisfactory. Each sample, 2 of which were from the same farm, contained 0.1 i.u. of penicillin activity per millilitre of milk. Investigations by the Sampling Officer confirmed the use of antibiotics at the farm and warnings were issued.

A total of 36 sterilized milks were examined and found to satisfy the prescribed turbidity test.

The following tables give data of the average composition of milks sampled during 1971:

AVERAGE COMPOSITION OF MILK SAMPLES 1971

Variety	Number of samples	Fat (per cent)	Non-fatty solids (per cent)	Total solids (per cent)
Channel Islands milk ..	52	4.28	8.89	13.17
Other milk samples	433	3.57	8.63	12.20
All milk samples	485	3.64	8.66	12.30

Quarterly variation in Average Composition of Milk Samples
(excluding Channel Islands milk)

Quarter	Number of samples	Fat (per cent)	Non-fatty solids (per cent)	Total solids (per cent)
First	51	3.58	8.44	12.02
Second	82	3.41	8.56	11.97
Third	269	3.60	8.69	12.29
Fourth	31	3.78	8.60	12.38
Whole year 1971	433	3.57	8.63	12.20
Whole year 1970	390	3.68	8.63	12.31

ARTICLES OTHER THAN MILK

Of the 793 samples of foods and medicinal preparations examined during the year, 50 were reported as adulterated or otherwise unsatisfactory. Details of these samples have already been reported each quarter to the Health Committee. Some of the more interesting instances are given in the following paragraphs.

A number of preserves failed to reach the standard prescribed by the Food Standards Preserves Order. One sample of Blackcurrant Jam contained 20% of fruit (minimum standard 25%), four samples of Apple & Blackcurrant Jam contained between 28 and 32% (minimum 40%), and a sample of Raspberry Jam contained 27% of fruit (minimum 30%). The determination of fruit content in preserves is a difficult one owing to the wide natural variation of the constituents used for the calculation. A sample of Redcurrant Jelly contained the artificial colouring matter Ponceau MX, the use of which for colouring food is now illegal. A sample of Beetroot in Redcurrant Jelly was of poor colour and showed some attack on the metal lacquered lid.

Low results for meat pies were again recorded during the year. One sample of Steak Pie contained only 20% of meat and 2 samples of Steak & Kidney Pie contained 17% and 18% of meat, (minimum standard 25%). A sample of Meat & Vegetable Pie was slightly low in meat with only 12% (minimum standard 12½%). Of the many canned products examined during the year, only one contained an excess of tin. This was a sample of canned New Potatoes and was found on analysis to contain 260 p.p.m. of tin (recommended limited 250 p.p.m.) and showed heavy etching of the tin plate. However, further samples from the same source were satisfactory.

The Soft Drinks Regulations lay down a minimum sugar content requirement for Soft Drinks. Six samples of Lemon Drink from the same manufacturer contained between 14.4 and 21.5% of sugar compared with the minimum requirement of 22.5%.

Sixty-eight samples of Butter and Margarine were examined during the year for genuineness and compliance with legal standards. All except 3 were satisfactory and these, all butters, were marginally faulty. Two contained a slight excess of water, and the other showed a small deficiency in milk fat content.

Dried Skimmed Milk is a product for which a maximum moisture content is prescribed in addition to precise labelling requirements. One sample had a small excess of moisture and 2 were not, in my opinion, labelled correctly.

Many of the articles of food submitted for analysis are routinely tested for the presence of preservative including sulphur dioxide, benzoic acid, sorbic acid and the various esters of p-hydroxy benzoic acid. It is unusual to find the latter but a sample of Chilli Sauce (from Singapore) contained 100 p.p.m. of propyl p-hydroxy benzoate. This amount is permitted but the sample should have been labelled 'this sauce contains preservative.' It was also found to contain an undeclared ingredient (maize starch).

In September 1971 the Preservative in Food Regulations were amended so as to establish a legal limit of 500 p.p.m. for sodium nitrate in bacon, ham and pickled meat. Eleven samples of canned meat products of the same manufacturer, comprising 2 of Ham & Chicken Roll and 9 Ham & Beef Roll contained sodium nitrate at a level between 1,200 p.p.m. and 1,800 p.p.m. This was a very large excess over the new legal limit and resulted in considerable quantities of the product being withdrawn from sale.

A sample of Effervescent Decongestant Tablets (Alka-Cold) contained only 9 tablets instead of the 10 declared but also had an unsatisfactory label since the presence of Vitamin C was claimed but no statement as to the actual content was given. In my opinion, as this was one of the active constituents, its quantitative declaration was required in addition to those of the other drugs present.

SPECIAL SURVEY INTO TOXIC METAL LEVELS IN FISH

As a result of the American finding of mercury in canned tuna fish, an investigation was started by Public Analysts of the area covering South Wales and the West of England into levels of mercury, lead, arsenic, cadmium, zinc and copper in a variety of fish foods, both fresh and canned.

A total of 209 samples, including 48 of tuna fish (involving approximately 1,000 analyses), were examined by eight participating laboratories during the early part of 1971. A brief summary of the findings is as follows:

Mercury – Tuna fish showed a mean level of 0.34 p.p.m. Most other fish contained less than 0.1 p.p.m. The U.S.A. limit is 0.5 p.p.m.

Arsenic – The bulk of samples contained less than 1 p.p.m. although some, particularly fresh water fish, contained up to 10 p.p.m. The general limit of 1 p.p.m. set down by the Arsenic in Food Regulations does not apply where the arsenic may be naturally present.

Lead – Most samples, including tuna, contained less than 2 p.p.m. (the general legal limit set by the Lead in Food Regulations) but twelve samples, mostly canned, contained between 3 and 5.5 p.p.m. (limit for canned fish 5 p.p.m.)

Cadmium – Trace amounts up to 0.2 p.p.m. were found in many samples. A few isolated cases of cockles and canned salmon contained between 1 and 3 p.p.m. and crab fish pastes contained up to 9 p.p.m. This latter finding was interesting and further studies of crab and other crustacea carried out later by this laboratory confirmed this tendency for cadmium to accumulate in the crab. Whether these levels of cadmium are significant toxicologically is not yet known.

Copper and Zinc – Both metals were found to be widely distributed but in general levels fell below the recommended limits of 20 and 50 p.p.m. respectively. Both are essential elements in trace amounts but become toxic at higher levels.

IMPORTED FOODS SUBMITTED BY THE PORT HEALTH AUTHORITY

The Chief Port Health Inspector for the Cardiff Port Health Authority submitted 61 samples for chemical examination during the year. They consisted of the following articles of food:

Canned: Breast of Chicken Roll	1	Fresh: Apples	2
Grapefruit Segments	1	Grapefruit	8
Grapefruit Juice	2	Lemons	7
Orange Juice	7	Mandarins	1
Ox Tongue	1	Melons	3
Tomatoes	3	Oranges	18
Butter	2	Pears	1
Rice	1	Tangerines	1
Wheat Grain	2		

Within the last few years the Port of Cardiff has become one of the major importers of citrus fruit in the United Kingdom, the imports being mainly from South Africa and Israel. It is therefore necessary to continue the examination of samples for compliance with the preservative regulations etc. Tests were made for the presence of mineral oil, insecticide residues and the fungicides, ortho phenyl phenol and diphenyl. This fungicide is permitted up to a maximum of 100 p.p.m., and was present to the following extent:

Grapefruit	Nil, < 10, 10, 10, 15, 30, 35, 40 and 50 p.p.m.
Lemons	Nil, 5, 5, 15, 20, 40 and 56 p.p.m.
Mandarins	5 p.p.m.
Oranges	10, 10, 15, 15, 20, 20, 20, 20, 25, 25, 25, 30, 30, 40, 40, 40, 60 and 70 p.p.m.
Tangerines	1 p.p.m.

Apart from fresh citrus fruits, pears and melons were also submitted. Tests for pesticides, including lead and arsenic, were negative. The pears, however, contained 2 p.p.m. of copper which is below the maximum of 3 p.p.m. permitted by the regulations. The copper was almost entirely on the surface of the fruit and was derived from the impregnated paper wrapping. A legal maximum of 125 p.p.m. is prescribed for ortho phenyl phenol in fresh melons but none was detected in the samples examined. The canned fruit and fruit juice were of satisfactory quality with no significant quantities of tin or lead, as were 3 samples of canned tomatoes of Italian origin. Two samples of butter were satisfactory with no excess water. The two samples of wheat grain were submitted because of a very unusual contamination with ergot, a fungal parasite which occasionally attacks wheat and other grain. The fungus is black in colour, resembles wheat grain in size, and contains toxic alkaloids. One of the samples contained about 0.1 % of whole ergot but the second sample taken after cleaning was satisfactorily free of ergot.

FERTILISERS AND FEEDING STUFFS ACT 1926

A total of 40 samples comprising 6 fertilisers and 34 feeding stuffs were submitted by the Chief Public Health Inspector during the year. The Fertilisers & Feeding Stuffs Regulations require in the case of fertilisers a statutory declaration of nitrogen, phosphorus and potash and prescribe limits of variation on the declared values. Pre-packed articles on retail sale were required after October 1970, to carry additional declarations of added nutrients or trace elements. The samples examined consisted of 5 general fertilisers and 1 Sulphate of Ammonia. Only one sample declared trace elements (magnesium and iron). All samples were found to be of satisfactory composition. Feeding Stuffs are required to declare major food constituents such as oil, protein and fibre and added trace metals such as copper and, in appropriate cases, coccidiostats. Oil, protein and fibre were found to be correct in all samples except one. This was low in protein being 0.9 units below the lower limits of variation. Three samples of poultry food contained the coccidiostats amprolium, sulphaquinoxaline and ethopabate in correct amounts. A sample of Pig Meal contained dimetridazole and copper within the limits of variation. Rabbit Pellets contained a low level of sulphaquinoxaline. However, the Regulations do not apply to rabbit foods. Copper was present in 3 samples at the correct level. A sample of Milk Cubes contained magnesium in excess of 0.5 % but did not declare the quantitative amount present.

ANALYTICAL METHODS DEVELOPMENT

Some applied research is essential as part of a general need to develop suitable methods of analysis to deal with regulation enforcement and to solve specific problems as they arise. It is, however, difficult to do this, and at the same time attend to the day to day work – what is really needed is a senior chemist whose duties are in the main applied analytical research. Nevertheless some work has been attempted and the following briefly indicates its scope.

Electrophoresis in the identification of fish species. Mr. J. G. Jones attended a course at Leeds on this topic and has since studied the technique, using polyacrylamide gel, in some detail. Official samples of fish in batter submitted by Weights & Measures Department have also been examined to ascertain whether they had been correctly described.

Toxic metals – With the arrival of the Varian-Techtron atomic absorption spectrophotometer in August, much investigatory work was necessary particularly in its application to lead, cadmium, zinc, etc. The flameless technique for mercury traces in fish etc., was also studied. Excellent results were obtained with a simple and inexpensive absorption tube without end windows and minute levels were readily detected. This work was carried out by the Deputy City Analyst who also experimented with the so-called 'boat technique' in which micro-samples are introduced directly into the flame on small laboratory-prepared boats of nickel. This technique is extremely sensitive and particularly suitable for cadmium traces in air samples.

Infra-red analysis – Reference spectra of many organic solvents were made in connection with the identification of a paint stripping material. The possible use of infra-red in the identification of edible gums was studied in relation to the enforcement of the Cream Regulations 1970.

Nitrate and nitrite determination in meat – A proposed method for these preservatives was critically examined and found to give satisfactory recoveries. A cadmium column is used to reduce nitrate to nitrite and the latter estimated colorimetrically. The method was sufficiently straight forward to be used in the normal examination of Food & Drug samples.

AIR POLLUTION

The necessary analytical work in this field is carried out for both Cardiff and Swansea and includes monthly analysis of deposit gauge contents for soluble matter, insoluble matter (ash and combustible matter), pH value and volume of rainwater collected.

The results for the year for the three deposit stations in Cardiff are summarised, together with 1970 data, in the following table:

Deposition in Tons per square mile per year

Station	Total Insoluble deposit		Insoluble Mineral Matter – Ash		Rainfall (inches)	
	1971	1970	1971	1970	1971	1970
City Hall	95	79	61	30*	29	38
Curran Road	140	126	93	86	34	42
Moorland Road	251	245	169	190	30	37

*Results for nine months only

Additional deposit gauges have been set up at Newport Road and Lansdowne Road in order to gain information as to background levels at these particular sites.

Continuous recordings of the daily smoke and sulphur dioxide levels in the air at six stations within the city were made throughout the year. Five of the stations are now equipped with automatic 8-day sampling units, and in these cases the titrations for sulphur dioxide and the reflectometric measurements of the smoke stains are made weekly.

The results for 1971, together with those for the previous year are tabulated below:

Smoke and Sulphur dioxide concentrations

Site	Smoke Concentration Micrograms per cubic metre Daily Average		Sulphur dioxide Concentration per cubic metre Daily Average	
	1971	1970	1971	1970
City Hall	47	44	84	107
Curran Road	54	52	92	88
Moorland Road	39	52	102	118
Llanrumney	35	30	53	61
Crofts Street	90	51	88	94
Llanishen	26	23	60	48

MISCELLANEOUS SAMPLES EXAMINED FOR PUBLIC HEALTH DEPARTMENT

The Public Health Inspectorate receives complaints from the public with regard to foreign matter in food, quality of drinking water supply, air pollution and other nuisances. Many of these complaints result in samples being submitted to the laboratory for chemical or microscopical examination. A total of 294 samples (compared with 178 in the previous year) were received during 1971 and a brief outline of the type of sample received is given below.

(a) Foods

Bottle of milk (contained visible dirt); bread roll (part of rodent dropping); bread (2) (discoloured dough); bread (black beetle and fragments); bread (string); bread (black metallic iron and iron oxide); Spider Beetle found in bread; maggot found in chicken; chocolate lolly (bitter taste due to calcium chloride); chips (fragments of woodlouse); yoghurt (penicillium mould); coffee beans (presence of alum); pork pie (fly embedded in pastry surface); beef steak & mushroom pie (foreign body consisting mainly of chalk; raisin flavoured cordial (contained Ponceau MX non permitted colouring); egg (for examination of shell as to freshness); vodka & lime (short measure), rum & raisin ice cream (insufficient rum); desiccated coconut (2) (for rancidity) all were satisfactory; custard slice (fly in flattened condition resting in pastry); canned stewed steak in gravy (contained piece of dark coloured tape); potato crisp (large lump of cooked starch, oil and flavouring); biscuits – these had a tom cat odour but chemical tests for the compound usually responsible were negative; butter (slightly rancid); bottle of lemonade (paraffin taint); chicken & mushroom casserole (unpleasant sour odour); canned grapefruit juice (2) (excessive tin content).

Twenty-seven samples of UHT milk were tested for chemical composition and 18 samples of liquid egg were examined under the provisions of the Liquid Egg, Pasturisation Regulations 1963. All of the liquid egg samples satisfied the test indicating that they had been satisfactorily heat treated.

(b) Miscellaneous samples

Various kinds including dusts, deposits and paints etc., were submitted for examination. Many of these samples were taken as part of air pollution investigation work or were the subject of complaint. They included samples of soot, acidic smuts, dust from factory handling asbestos and wood fibre board, shot blast dust, foundry sand, grit and waste rubber particles from factory etc. Microscopical examination is usually carried out and in some cases additional chemical tests.

A considerable increase in the number of air filter samples examined for metal contamination occurred during the year. Tests were carried out on samples from sites at Newport Road, Norwich Road and Moorland Road, and the metals of main concern were lead, zinc and latterly cadmium. The newly acquired atomic absorption spectrophotometer has proved most useful for this work. The levels found varied widely but typical results were around 0.5 micrograms per cubic metre for lead and zinc and much lower for cadmium.

Five samples of paint scrapings taken from a house where a child was suffering from lead poisoning were analysed for lead content. Two of these showed large amounts of lead.

(c) Waters

Independent analyses of 114 water samples taken from domestic taps throughout the city were made during 1971. Some of these samples were received on complaint, usually of excessive deposits of iron oxide. Swimming bath samples from various pools were tested and advice given where appropriate, on any adjustments to treatment required. Seepage waters from basements were analysed in an attempt to trace their source.

SAMPLES RECEIVED FROM OTHER SOURCES CITY SURVEYOR'S DEPARTMENT

Analyses included lubricating oils (6), grease (1), and antifreeze (1) for compliance with the Corporation specification. Gas oil (2) used in diesel engines for sulphur content; thermoplastic road marking material (2) for comparison; miscellaneous samples (12) from Fitzalan School swimming pool in connection with paint film failure; cleaning fluids (2) and silicone water proofing (1) for composition.

PARKS DEPARTMENT

Water samples from Roath Lake and stream at Fairwater Park were analysed and tests for nitrogen, phosphorus and potash were made on a sample of soil for comparison with a proprietary test kit.

WEIGHTS AND MEASURES DEPARTMENT

Three samples of gin were examined for proof spirit content in connection with short measure; dog condition tablets of three different strengths were compared; water from a petrol tank was tested to see if it was sea water or fresh water and the plastic material of which a toy concertina was constructed was checked for the presence of celluloid.

BATHS DEPARTMENT

One sample from the Guildford Crescent Baths was examined for the Superintendent to ascertain the cause of the turbidity of water.

PRIVATE SAMPLES

The type of sample received from various private sources was again quite varied. Some of the items analysed were – paint coating on toy castanets used by children in a local hospital – these contained excessive amounts of lead; stream waters (2) from a farmer; vodka (5) for proof spirit content; emulsion paint (5) for a builder; water from a hospital for content of toxic metals particularly cobalt; floating scum from hospital swimming pool; substance taken from outer surface of car and alleged to have caused damage to paintwork. Appropriate fees were charged for this work.

This laboratory is one of those officially listed by the Royal Institute of Chemistry as having facilities for the gas chromatographic analysis of blood and urine for alcohol content. Under the Road Safety Act 1967 persons charged are given a second specimen of blood or urine which they may submit for independent analysis if they so wish, the analysis being carried out on payment of a fee. During 1971, 34 specimens comprising 32 bloods and 2 urines were analysed. This compares with 30 specimens in 1970. The prescribed limit is 80 milligrammes of ethyl alcohol per 100 millilitres of blood and 107 milligrammes per 100 millilitres of urine and the samples examined had the following contents:

Blood: 64, 83, 84, 87, 90, 94, 95, 105, 115, 120, 125, 130, 139, 140, 140, 144, 145, 150, 150, 156, 156, 162, 166, 170, 205, 227, 235, 250, 265, 270, 280, 290.
Urine: 265, 350.

Only one sample out of 34 was under the legal limit although in 1970 six out of 30 were below.

SAMPLES EXAMINED FOR THE CITY OF SWANSEA

Your Public Analyst and Deputy Public Analyst hold official appointments to the City of Swansea under the Food & Drugs Act and during the year a total of 508 samples (46 unsatisfactory) were received from their Chief Public Health Inspector. Other samples examined included: waters, deposit gauges and miscellaneous for the Public Health Department; foods for the Port Health Authority; sewages and trade effluents for the City Engineer & Surveyor; fertilisers, feeding stuffs, toys etc., for the Chief Inspector, Weights & Measures Department.

ANALYSES MADE FOR THE WEST GLAMORGAN WATER BOARD

The West Glamorgan Water Board, which at present serves a population of about 400,000 continued to submit samples of water for analysis during 1971. The samples covered a wide variety of water sources including upland surface, river derived and from deep springs. A total of 774 samples were received and the results of all analyses made were reported to the Water Engineer of the Board.

LABORATORY ACTIVITIES

At laboratory technician level several changes of staff occurred during the year. Both posts became vacant in January and one was filled in February by Miss G. Williams who is still with us. The other post has had four occupants during the year and is now filled by Mrs. M. Fletcher. Fortunately 1971 did not see any changes in the graduate staff.

It is very pleasing to be able to record that two of our senior chemists Mr. B. J. Sanders, B.Sc., A.R.I.C. and Mr. J. G. Jones, M.Sc., G.R.I.C. were successful in the examination for the Mastership in Chemical Analysis (M.Chem.A.) of the Royal Institute of Chemistry. This post graduate diploma is the statutory qualification required for appointment as Public Analyst or Deputy and it is the first time for 15 years that anyone has qualified from the City of Cardiff laboratory. The present success is the direct fruition of Health Committee's policy in 1964 of appointing honours graduates to the more senior positions in the laboratory and encouraging them to study for the M.Chem.A. diploma. Additionally it should be mentioned that Mr. J. G. Jones was also awarded an M.Sc. degree in August 1971 for chemical research which he carried out part-time at U.W.I.S.T. over the three previous years.

During the year visits were paid to the laboratory by interested parties and an open day was held to show equipment, techniques and items of general interest, including a slide show illustrating the work carried out.

FEES

During 1971, fees received by the laboratory from all sources (excluding the Public Health Department of the City of Cardiff) amounted to £6,322.

REPORT OF THE VETERINARY OFFICER CHIEF MEAT INSPECTOR AND ABATTOIR AND MARKETS MANAGER

by E. B. DAVIES, B.V.Sc., M.R.C.V.S.

DISEASES OF ANIMALS ACT 1950

This Act empowers the Minister of Agriculture, Fisheries and Food to make Orders and Regulations for the control and eradication of animal diseases which are of economic importance or a danger to public health.

The zoonotic disease in which we should perhaps continue to take the greatest interest is Rabies. Thanks to our stringent quarantine system the disease has only occurred once or twice in this country in recent times and we must hope that this situation will continue. If it were to become endemic in this country it would be a disaster.

Another disease which attracts a lot of public interest, even though it is not dangerous to man, is Foot and Mouth Disease. Everyone will remember the 1967/68 epidemic. Fortunately the disease has not reappeared since then, perhaps partly because we now refuse to accept South American meat unless the bones which may harbour the virus have been removed in the country of origin.

The Swine Fever Order 1963: Swine Fever, which was once such a scourge of the pig population, has ceased to be a problem since the implementation of the slaughter policy permitted by this order. One isolated case of the disease did however occur this year after the country had been completely free for four years. Perhaps it was meant as a warning to us against overconfidence in our disease control measures.

The Regulation for the Movement of Swine Order 1959: This order is complimentary to the previous one in the control of Swine Fever. It assists the tracing of in-contact pigs by requiring the licensing of pigs from auction marts and pig dealers' premises. During the year 467 licences were received authorising the movement of 5,035 pigs to the abattoir and pig feeders' premises in the City.

The Diseases of Animals (Waste Foods) Order 1957: This order provides for the boiling of kitchen waste before it is used as an animal feeding stuff so as to prevent the spread of disease. Boiling plants and equipment have to be licensed and inspected periodically. Fifteen visits were made to plants in the city in connection with this Order during the year.

Tuberculosis Order 1964: The campaign to eradicate this disease in bovines has been so successful that routine meat inspection failed to find the disease in 14,864 cattle slaughtered at the abattoir. Tuberculin tests are however carried out by the Ministry of Agriculture, Fisheries and Food on the cattle population and these reveal the occasional reactor. During the year eight of these reactors were sent to the abattoir for routine post mortem examination and reports and specimens were sent to the Ministry.

Anthrax Order 1938: During the year one case of anthrax was confirmed in a bovine at Messrs. Beresford, Knacker's Yard, Ferry Road, Cardiff. The necessary arrangements were made for the destruction of the carcass and the Medical Officer of Health checked upon the health of the personnel who had been in contact. Routine examinations for anthrax were made upon the carcasses of two sheep, two pigs and one cow found dead in the lairage at the abattoir. All proved negative.

Brucellosis (Accredited Herds) Scheme: Twenty-two cattle which reacted to the Brucellosis test were sent in for slaughter at the abattoir by the Ministry of Agriculture, Fisheries and Food. Post mortem reports and specimens were forwarded to the Ministry.

The Slaughter of Animals Act 1958: Seven new licences and thirty renewals to stun and slaughter animals were granted for the year beginning 1st January, 1971.

ANIMAL WELFARE

The Riding Establishment Acts 1963 and 1970: The 1970 Act came into operation on 1st January of this year and serves to strengthen the earlier Act. There are two licensed establishments in Cardiff and a total of sixteen visits were made to the premises.

The Animal Boarding Establishment Act 1964: Only one cattery is licensed under this Act. It was visited periodically.

Protection of Animals Acts 1911-1927: Stray animals are frequently injured in road accidents and veterinary assistance is often required. The bulk of this work is done by the veterinarians in general practice in the city, but assistance was given on six occasions.

Pontcanna Equitation Centre: Veterinary assistance was given to this Centre as required.

MEAT INSPECTION STATISTICS

Carcases and Offals Inspected and Condemned in Whole or Part

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed	14,864	271	1,060	48,117	28,231	Nil
Number inspected	14,864	271	1,060	48,117	28,231	Nil
ALL DISEASES EXCEPT TUBERCULOSIS						
Whole Carcases condemned	12	3	16	58	85	Nil
Carcases of which some part or organ was condemned	9,354	199	23	11,590	6,510	Nil
Percentage of number inspected affected with disease other than Tuberculosis or Cysticercosis	63.01	74.53	2.16	24.20	23.36	Nil
TUBERCULOSIS						
Whole carcasses condemned	Nil	Nil	Nil	Nil	Nil	Nil
Carcases of which some part or organ was condemned	Nil	Nil	Nil	Nil	408	Nil
Percentage of number inspected affected with Tuberculosis	Nil	Nil	Nil	Nil	1.43	Nil
CYSTICERCOSIS						
Carcases of which some part or organ was condemned	83	3	Nil	Nil	Nil	Nil
Carcases submitted for treatment by refrigeration	Nil	Nil	Nil	Nil	Nil	Nil
Generalised and totally condemned	Nil	Nil	Nil	Nil	Nil	Nil
Percentage of number inspected affected with Cysticercosis	0.56	1.10	Nil	Nil	Nil	Nil

Animals Slaughtered - Comparative Table

	1971	1970	1969	1968	1967	1966	1965	1939
Cattle ..	15,135	17,465	12,087	13,751	11,551	8,524	8,301	6,693
Calves ..	1,060	1,618	1,574	2,283	3,172	2,345	1,654	7,788
Sheep ..	48,117	58,667	49,875	64,230	76,683	68,299	67,179	53,632
Pigs ..	28,231	27,426	28,533	30,595	27,037	30,543	31,033	25,257
TOTAL ..	92,543	105,176	92,069	110,859	118,443	109,711	108,167	93,370

Incidence of Tuberculosis

	Macroscopic Lesions	Percentage	Percentage Corresponding Period 1970
ANIMALS SLAUGHTERED			
Sheep 48,117	Nil	Nil	Nil
Pigs 28,231	286	1.01	0.82
TOTAL ANIMALS SLAUGHTERED (including Attested, Reactors and Irish Cattle)			
Cows 271	2	0.74	8.56
Steers/Heifers 14,825	1	0.006	0.05
Bulls —	Nil	Nil	Nil
Calves 1,060	Nil	Nil	Nil
KNOWN REACTORS AND DANGEROUS CONTACTS (sent in by M.A.F.F.)			
Cows 3	Nil	Nil	Nil
Steers/Heifers 1	Nil	Nil	Nil
Bulls —	Nil	Nil	Nil
Calves —	Nil	Nil	Nil
IMPORTED IRISH CATTLE			
Steers/Heifers 38	Nil	Nil	Nil

Incidence of Cysticercosis

Animals Slaughtered	Number of Cases of Cysticercosis Bovis	Percentage of Infestation	Percentage Corresponding Period 1970
Cows 271	3	1.10	2.05
Steers/Heifers 14,864	83	0.56	0.27

Incidence of Hydatid Cysts

Animals Slaughtered	Number of Cases of Hydatid Cysts	Percentage of Infestation	Percentage Corresponding Period 1970
Cattle 15,135	192	0.13	0.96
Sheep 48,117	1,780	0.03	2.28

Table Showing Causes of Rejection of Carcasses and Part Carcasses

Diseases	Cattle		Calves		Sheep		Pigs	
	Total	Part	Total	Part	Total	Part	Total	Part
Tuberculosis/Emaciation	—	—	—	—	—	—	—	286
Oedema/Emaciation ..	7	—	—	—	43	5	4	—
Decomposition	—	14	—	—	—	5	—	236
Traumatism	—	7	—	—	—	7	1	77
Pyæmia	—	—	5	—	—	—	5	—
Arthritis	—	1	—	1	—	12	1	78
Erysipelas	—	—	—	—	—	—	1	2
Abscesses, Multiple								
Abscesses	—	6	—	1	—	11	46	485
Pleurisy, Acute Pleurisy ..	1	—	—	—	7	16	11	76
Moribund	—	—	—	—	3	—	2	—
Peritonitis, Acute								
Peritonitis	3	—	2	—	1	—	3	—
Mastitis, Septic Mastitis ..	1	—	—	—	—	—	1	—
Jaundice	—	—	2	—	—	—	4	—
Septicaemia	—	—	—	—	1	—	3	—
Fevered	—	—	1	—	1	—	1	—
Bonetaint	—	6	—	—	—	4	—	—
Tumours	—	—	—	—	1	—	—	—
Injuries/Bites	2	25	—	—	1	19	1	3
Bloodsplashing	—	—	—	—	—	6	—	—
Joint Ill	—	—	6	—	—	—	—	117
Johnes Disease	1	—	—	—	—	—	—	—
Rash	—	—	—	—	—	—	—	2
Pneumonia, acute								
pneumonia	—	—	—	—	—	1	1	—
Pigmentation	—	2	—	—	—	—	—	—
TOTAL	15	61	16	2	58	86	85	1,362

Weight of Meat and Offal Rejected from Animals Slaughtered

	Tons	Cwts.	Qrs.	lbs.
15 Carcasses Beef	2	17	0	15
16 Carcasses Veal	—	9	0	7
58 Carcasses Mutton	—	16	2	9
85 Carcasses Pork	3	8	0	2
61 Part Carcasses Beef	1	11	0	2
2 Part Carcasses Veal	—	—	—	16
86 Part Carcasses Mutton	—	7	3	21
1,362 Part Carcasses Pork	7	5	1	11
Beef Offal	33	18	2	4
Calf Offal	—	—	2	0
Sheep Offal	8	19	3	8
Pig Offal	6	15	0	21
TOTAL	66	9	1	4

Total weight of meat and offal condemned:

66 tons, 9 cwts. 1 qtr. 4 lb.

Condemnation Certificates

798 Certificates were granted in respect of condemned carcasses, part carcasses, and offals at Cardiff Abattoir and Wholesale Meat Market during the year 1971.

Number of Organs Rejected

	Cattle	Calves	Sheep	Pigs
HEADS (including Tongues) ..				
Tuberculosis	—	—	—	286
Other Conditions	124	—	—	—
TONGUES				
Tuberculosis	—	—	—	—
Other Conditions	168	—	—	—
LUNGS				
Tuberculosis	—	—	—	—
Other Conditions	2,487	—	—	—
HEARTS				
Tuberculosis	—	—	—	—
Other Conditions	130	—	—	—
SKIRTS				
Tuberculosis	—	—	—	—
Other Conditions	126	—	—	—
LIVERS				
Tuberculosis	—	—	—	—
Other Conditions	6,355	—	8,495	3,342
PLUCKS				
Tuberculosis	—	—	—	—
Other Conditions	—	21	3,009	1,684
TRIPES				
Tuberculosis	—	—	—	—
Other Conditions	42	—	—	—
TAILS				
Tuberculosis	—	—	—	—
Other Conditions	61	—	—	—

PORT HEALTH SERVICE

REPORT FOR 1971 OF MR. T. G. NEWBY, MASTER MARINER, M.A.P.H.I. CHIEF PORT HEALTH INSPECTOR

The Cardiff Port Health Authority was constituted by Provisional Order in 1882, becoming permanently constituted with extended limits of jurisdiction in 1894. The limits of the Port Health District extend from Sully Island to the Rhymney River, the Authority having jurisdiction over all waters, docks, harbours and vessels within the said limits.

The Port Health Authority is invested with all the functions, rights and liabilities of an Urban Sanitary Authority under certain sections of the Public Health Acts, so far as they are applicable to waters, vessels, persons, goods or things on, or landed from, any vessel within the said jurisdiction.

In accordance with the instructions of the Ministry of Health, Form Port 20, Sections I, V, VI, VIII, XIV, XV and XVI of the report are not repeated in full.

SECTION I—STAFF

TABLE A

Changes in Medical Staff during the year.

NO CHANGE

SECTION II

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR

The number and tonnage of vessels entering the port (which includes Ely Harbour) inspected by Officers of the Port Health Authority during 1971 are set out below:—

TABLE B

Ships from	Number	Tonnage	Number Inspected by the		Number of Ships reported as having or having had during the voyage infectious disease on board
			Medical Officer of Health	Port Health Inspector	
Foreign Ports ..	502	1,190,938	80	103	Nil
Coastwise	590	930,360	1	55	Nil
TOTAL ..	1,092	2,121,298	81	158	Nil

The following table shows the number of vessels entering the port which were dealt with by the department each month during 1971.

Month	From Foreign Ports	Coastwise	Total
January	44	48	92
February	32	51	83
March	30	64	94
April	32	58	90
May	38	52	90
June	38	47	85
July	48	54	102
August	50	37	87
September	41	50	91
October	40	46	86
November	62	45	107
December	47	38	85
TOTAL	502	590	1,092

The nationalities of the several types of vessels entering the port which were dealt with by the department during 1971 are shown in the following table:—

Nationality	Steam	Motor	Dumb Barges	Total
Belgian	16	4	—	20
British	15	535	—	550
Bulgarian	—	11	—	11
Cypriot	1	—	—	1
Danish	—	38	—	38
Dubai	1	—	—	1
Dutch	1	38	—	39
Finnish	—	5	—	5
French	—	7	—	7
German	—	138	—	138
Greek	2	12	—	14
Honduran	1	—	—	1
Icelandic	—	1	—	1
Indian	—	5	—	5
Irish	—	30	—	30
Israeli	—	6	—	6
Kuwaiti	1	—	—	1
Liberian	13	12	—	25
Mexican	—	3	—	3
Norwegian	—	61	—	61
Pakistani	—	2	—	2
Panamanian	2	4	—	6
Polish	3	19	—	22
Russian	2	45	—	47
Singapore	—	1	—	1
Spanish	1	5	—	6
South African	—	8	—	8
Swedish	—	43	—	43
TOTAL	59	1,033	—	1,092

SECTION III

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

TABLE C

Passenger Traffic	{	Number of passengers INWARDS	Commonwealth	29	}	427
			British	112		
			Alien	286		
	{	Number of passengers OUTWARDS	Commonwealth	27	}	277
			British	46		
			Alien	204		
Cargo Traffic	{	Principal IMPORTS – Iron ore, timber, bones, general, fuel oil, fruit, grain and aluminium.				
		Principal EXPORTS – Heavy iron and steel goods, and general merchandise.				

Principal countries from which ships arrive – Belgium, Canada, Finland, France, Germany, Holland, India, Israel, Liberia, Norway, Poland, Portugal, Russia, Spain, Sweden, United States of America, West Africa and South Africa.

SECTION IV

INLAND BARGE TRAFFIC

Numbers and tonnage using the Districts and Places served by the Traffic:

NONE

SECTION V

WATER SUPPLY

NO CHANGE

Report and tests for contamination. – During the year 11 samples of drinking water from ships were submitted to the Public Health Laboratory for bacteriological examination, the results being as follows:—

Satisfactory	..	..	11
Contaminated	..	..	—
			—
Total	..	..	11
			—

SECTION VI

PUBLIC HEALTH (SHIPS) REGULATIONS 1970

Lists of Infected Areas

1. Lists amended from World Health Organisation's Epidemiological Report and copies sent to:

- (a) The Pilotage Board – Pier Head.
- (b) Dr. Thomas – Shipping Federation, Roath Basin.
- (c) H. M. Customs and Excise – Bute Street, Cardiff.
- (d) Dr. Griffiths – 86 Kingsland Crescent, Barry.

Radio Messages

2. (a) Non-radio receiving Port.
- (b) Chief Port Health Inspector's telephone emergency duty.

Notifications Other than by Radio

3. From Ship's Agents.
4. Mooring Situation – Queen's Dock.
5. (a) Normal hospitalisation arranged.
- (b) Surveillance and follow-up by Public Health Inspectors.
- (c) **Cleansing and Disinfestation** – During the year 8 vessels were found to be slightly infested with cockroaches, and notices were served upon the Masters requiring them to take all necessary steps to eradicate the insects. No seamen suffering from scabies were treated at the Cardiff Disinfecting Station.

SECTION VII**SMALLPOX****Name of Isolation Hospital to which Smallpox cases are sent from the District:**

From Lansdowne Hospital to St. Mary's Hospital, Smallpox Unit, Penarth.

Arrangements for transport of such cases to that hospital by ambulance, giving the name of the Authority responsible for the ambulance and the vaccinal state of the ambulance crews:

Arrangements are made at the Lansdowne Hospital, the Glamorgan County Council being responsible for the ambulance service.

Ambulance crews are vaccinated.

Names of Smallpox consultants available:

G. F. J. Thomas, M.R.C.S., L.R.C.P., D.P.H.
 Medical Superintendent,
 St. David's Hospital, Cardiff.
 E. Waddington, M.D., M.R.C.P.
 St. Winifred's Hospital, Cardiff.
 M. S. N. Pathy, M.R.C.S., M.R.C.P.
 Mathern Lodge,
 Cefn Coed Crescent, Cardiff.

Facilities for laboratory diagnosis of Smallpox:

Facilities are provided by the Public Health Laboratory Service, Institute of Pathology, Cardiff Royal Infirmary.

SECTION VIII**VENEREAL DISEASE**

The Treatment Centre for the diagnosis and treatment of venereal disease for seamen is at the Cardiff Royal Infirmary and 185 seamen were treated during the year. Nineteen cases of venereal disease came to the knowledge of the Port Health Inspectors during the year and were recommended for treatment at the centre.

The following table provides an analysis of the country and origin of the seamen and the conditions for which they were treated:

Nationality	Number Examined	Syphilis	Gonorrhoea	Other Conditions
British	97	1 *	31	65
Norwegian	7	—	2	5
South African	10	—	2	8
Greek	8	1 **	3	4
Estonian	2	—	—	2
African	3	—	—	3
Somali	2	—	—	2
German	9	1 **	4	4
Danish	4	—	2	2
French	6	—	1	5
Dutch	2	—	1	1
Australian	1	—	1	—
Egyptian	4	—	2	2
Israeli	3	—	1	2
Polish	2	—	1	1
Arabian	4	—	2	2
Persian	1	—	—	1
Portuguese	2	—	—	2
Spanish	1	—	—	1
Maltese	3	1 *	2	—
Chinese	1	1 *	—	—
Indian/Pakistani	4	—	2	2
British West Indian	1	—	1	—
Irish	2	—	1	1
Chilian	1	—	—	1
Iraqi	1	—	1	—
New Zealander	1	—	—	1
Italian	2	—	1	1
Brazilian	1	—	—	1
TOTAL	185	5	61	119

N.B. Syphilis marked with * Syphilis Latent
Syphilis marked with ** Syphilis Primary

SECTION IX

CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES ON SHIPS

TABLE D

There were no cases of infectious disease on board ship.

SECTION X

OBSERVATION ON THE OCCURRENCE OF MALARIA IN SHIPS

No cases of malaria were reported to have occurred on vessels entering the port during the year.

SECTION XI

MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE

No case, or suspected case of plague was reported to have occurred on vessels arriving at the port during the year. Vessels arriving from plague-infected or suspected areas are visited on arrival, or as soon afterwards as possible, by the Port Medical Officer and Port Health Inspector on rota duty. All vessels arriving from these areas are thoroughly searched for rat evidence by the rodent operative and, where necessary, trapping is carried out and any rats caught or found dead are submitted to the Public Health Laboratory for bacteriological examination.

SECTION XII

MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS

Procedure for inspection of ships for rats

NO CHANGE

Arrangements for the bacteriological or pathological examination of rodents, with special reference to rodent plague, including the number of rodents sent for examination during the year.

A proportion of all rats trapped or found dead after fumigation is submitted to the Public Health Laboratory for examination for the detection of plague.

Arrangements in the district for deratting ships and the methods used:

NO CHANGE

Deratting is carried out by private contractors, the undermentioned operate in the district:

Contra-Pest Service Ltd., 2 Ranelagh Road, London, E.6.

The Fumigation Services Ltd., Barking, Essex.

Rentokil Laboratories Limited, Cardiff.

Progress in the rat-proofing of ships:

The incorporation of rat-proofing principles in modern ship construction is having the desired effect of reducing rodent infestation to a minimum.

TABLE E

RODENTS DESTROYED DURING THE YEAR IN SHIPS FROM FOREIGN PORTS

Category					Number
Black Rats	—
Brown Rats	—
Species not known	—
Sent for examination	—
Infected with plague	—

TABLE F

DERATting CERTIFICATES AND DERATting EXEMPTION CERTIFICATES ISSUED DURING THE YEAR FOR SHIPS FROM FOREIGN PORTS

Number of Deratting Certificates Issued					Number of Deratting Exemption Certificates issued 6	Total Certificates issued 7
After fumigation with		After Trapping 3	After Poisoning 4	Total 5		
HCN 1	Other fumigant (state method) 2					
—	—	—	—	—	80	80

The fees received by the Port Health Authority in respect of these certificates amounted to £694.00.

SECTION XIII

INSPECTION OF SHIPS FOR NUISANCES

TABLE G
INSPECTIONS AND NOTICES

Category of Nuisance and number of Inspections	Notices served		Results of Serving Notices
	Statutory Notices	Other Notices	
Defects of Original Constructions	—	—	—
Structural Defects through Wear and Tear	—	Verbal 120	Ships on which defects were remedied 71
Dirt, Vermin and Other Conditions prejudicial to health	—	21	Ships on which nuisances were remedied 40
TOTAL 141	—	141	111

The number of visits and re-visits made to these vessels in connection with health survey and the remedy of sanitary defects and nuisances totalled 1,495.

Defects and nuisances found on vessels entering the port during the year 1971 are shown below:

Structural Defects through Wear and Tear

Defective:

Water Pipes	4
Crew Accommodation	1
Fresh Water Tanks	2
Cooking facilities	4
Heating	3
Skylights and portlights	8
Floor tiles	9
Wash-hand basins/washing facilities	24
Waste pipes and scuppers	18
Food lockers	10
Pans W.C.	13
Showers	15
Refrigeration	9

Dirt and other conditions prejudicial to health:

Dirty:

Crew accommodation	2
Fresh water tanks	3
Scuppers	4
Accumulation of Refuse	2

Verminous:

Cockroach infestation	8
Rat evidence	1
Quay nuisances	1

TOTAL 141

THE CLEAN AIR ACT**SECTION 20 – APPLICATION TO VESSELS****The Dark Smoke (Permitted Periods) (Vessels) Regulations 1958**

Smoke Emissions. – During the year 85 vessels were observed emitting dark smoke and the masters or persons in charge were advised of the above Regulations and appropriate action was taken to reduce the emissions. The number of visits made to these vessels was 134.

SECTION XIV**PUBLIC HEALTH (SHELL FISH) REGULATION 1934 and 1948**

NO CHANGE

SECTION XV**MEDICAL EXAMINATION OF ALIENS**

(Applicable only to Ports approved for the Landing of Aliens)

List of Medical Inspectors of Aliens holding Warrants of Appointment:

NO CHANGE

List of Other Staff engaged on this work:

NO CHANGE

Organisation of work:

NO CHANGE

Accommodation for Medical Inspection and Examination:

Aliens are able to attend for medical examination at Butetown Health Centre.

Nature and amounts of alien traffic:

Passenger traffic at the port is relatively small and casual. 58 ships arrived during the year with 286 alien passengers on board and none of these were subjected to detailed medical examination.

COMMONWEALTH IMIGRANTS ACT 1962**MEDICAL EXAMINATIONS**

During the year the number of arriving Commonwealth citizens subject to control under the Act was Nil.

SECTION XVI**MISCELLANEOUS**

NO CHANGE

The Dangerous Drugs Regulations 1953, No. 499, Section 13 (2) (a):

Two certificates were issued authorising the masters of foreign vessels to purchase dangerous drugs.

Certificates of Health:

No certificate in respect of the health of the port was issued to Shipping Companies during the year.

THE PREVENTION OF DAMAGE BY PESTS (APPLICATION TO SHIPPING) ORDER 1951

The Prevention of Damage by Pests (Application to Shipping) Order 1951, made under Section 23 of the Prevention of Damage by Pests Act 1949, applying the provisions of the Act, with appropriate modifications to shipping, has been strictly enforced.

Under the provisions of the above Order, periodical inspection of coastal vessels, etc., is carried out by officers of the department. No Rodent Control Certificates were issued to masters of vessels during the year.

Diseases of Animals Act, etc.:

39 dogs and 7 cats and 1 monkey were brought to the port on vessels. All the vessels were visited regularly during their stay in port to ensure that the requirements were observed.

FOOD INSPECTION

The principal food imports during the year were from Australia and New Zealand and consisted of beef, mutton, lamb, offal, butter and cheese. From Israel and South Africa fruit was imported and from European countries tinned fruit. In addition to these direct imports, quantities of foodstuffs, transhipped at other ports in the British Isles, arrived by coastwise traffic.

Examination of imported food is carried out by the food inspector in the dockside warehouses and occasionally on board ship. If the food examined is found to be in good condition, the whole consignment is released for distribution, but if found to be diseased or unsound, the whole consignment is detained until a complete examination is carried out. Diseased and unsound articles of food are disposed of under the supervision of the food inspectors. When necessary, samples of foodstuffs are submitted for bacteriological examination.

Examination of imported meat is carried out at the dock and local cold stores. The glandular examination of mutton and lamb carcasses over 42 lb. was continued.

Imported Foodstuffs:

The quantities of various kinds of foodstuffs imported during the year are shown in the following table:

DESCRIPTION	QUANTITY	DESCRIPTION	QUANTITY
Apples	73,717 ctns.	Grapes	29,969 trays
	76,612 pkgs.	Honey	2 tanks
Barley	2,189 tons	Lemons	103,614 pkgs.
Beer	320 ctns.	Lemon Juice Powder	50 drums
Bread	36 ctns.	Maize	7,393 tons
Butter	581,182 ctns.	Mandarins	512 pkgs.
Canned Cherries ..	1,020 ctns.	Melons	62,059 ctns.
Canned Chinese Food	13 containers	Mineral Water ..	200 ctns.
Canned Mexican Food		Oranges	5,011,063 pkgs.
Cheese	219,560 ctns.	Orange Juice	7,357 barrels
Corn Cobs	3 containers		16,625 ctns.
Flour	1,100 bags		5 plastic containers
Frozen Chinese Food	269 ctns.	Pears	13,233 pkgs.
Frozen Eels	36 cases	Peas	150 sacks
Frozen Fish	45 cases	Potatoes	16,000 bags
Frozen Lobster Meat	626 ctns.	Rice	800 tons
Frozen Poultry Rolls	757 ctns.	Tinned Grapefruit ..	2,075 ctns.
Frozen Salmon ..	138 cases	Tinned Orange Juice	675 ctns.
Grapefruit	2,147,968 pkgs.	Wheat	61,610 tons
Grapefruit Juice ..	2,050 casks	Wine	100 ctns.
	104 barrels		
	8,466 ctns.		

Overseas Meat:

In addition to the foodstuffs already referred to, 15 vessels arrived with the following quantities of overseas meat:

DESCRIPTION	QUANTITY
Dried Blood	1,000 bags
Frozen Beef	233 ctns.
Frozen Lamb	133,390 c/cases
Frozen Mutton	265 c/cases
Frozen Turkeys	2,800 ctns.
Ox Tongues	400 ctns.
Sundries	28,172 ctns.
Tegs	171 c/cases

The quantities of various kinds of foodstuffs withheld from human consumption during the year are shown below:

DESCRIPTION	QUANTITY
Butter	9 lbs.
Assorted Meat	2 cwt. 1st. 2 lbs.
Grapefruit Juice	9 — 19oz. tins
Orange Juice	6 — 19oz. tins 2 — 1.25 kilo-gram tins
Melons	18
New Zealand Lamb	222 c/cases

The Public Health (Imported Food) Regulations 1968, the Preservatives in Food Regulations 1962 and the Food and Drugs Act 1955:

61 samples of imported food were submitted to the Public Analyst for analysis. The nature, country of origin and the number of samples are shown in the following table:

Description	Country of Origin	Number of Samples
Apples	South Africa ..	1
Apples	New Zealand ..	1
Butter	New Zealand ..	1
Butter	America	1
Frozen Chicken Roll	North America ..	1
Grapefruit	South Africa ..	2
Grapefruit	Israel	6
Grapefruit Juice	Israel	2
Lemons	South Africa ..	3
Lemons	Israel	4
Mandarins	Israel	1
Melons	Israel	3
Oranges	Israel	11
Oranges	South Africa ..	7
Orange Juice	Israel	7
Pears	New Zealand ..	1
Rice	Italy	1
Tinned Grapefruit	Israel	1
Tomatoes	Italy	3
Tangarines	Israel	1
Ox Tongues	New Zealand ..	1
Wheat	North America ..	2
	TOTAL ..	61

Bacteriological Examination:

1 sample of imported food was submitted to the Public Health Laboratory Service for bacteriological examination.

MISCELLANY

Registration of Private Nursing Homes:

At the end of the year 5 homes were registered providing 24 maternity beds and 105 beds for other cases.

METEOROLOGICAL OBSERVATIONS

1971

The geographical position of the Meteorological Station, which is situated at Penylan, Cardiff, is latitude $51^{\circ} 30' N.$, longitude $3^{\circ} 10' W.$, and the height of the Station above mean sea level is 203 ft.

Observations were made daily at 9.00 a.m. (G.M.T.). Summaries of the observations made during 1971 are given in the following tables:

BAROMETRIC PRESSURE AND RELATIVE HUMIDITY

				Hygrometer		Mean Relative Humidity
				Dry Bulb (Mean)	Wet Bulb (Mean)	
						%
January	..	..		3.7	3.6	98
February	..	..		3.5	3.0	91
March	..	..		6.2	5.0	82
April	..	..		7.5	7.4	99
May	..	..		11.2	8.6	68
June	..	..		12.6	10.7	78
July	..	..		17.8	16.1	83
August	..	..		15.5	14.2	86
September	..	..		14.5	12.9	82
October	..	..		12.0	11.3	91
November	..	..		8.0	6.7	82
December	..	..		7.3	6.5	88
				9.983	9.175	85

TEMPERATURE °C

1971				Absolute Maximum	Absolute Minimum	Mean of Maximum	Mean of Minimum	Mean Temperature
January	..	..	..	12.3	-4.0	7.6	3.5	5.5
February	..	..	..	12.4	-1.8	7.7	1.5	5.0
March	..	..	..	13.8	-5.0	8.9	2.5	6.0
April	..	..	..	18.3	0.5	12.2	4.0	8.8
May	..	..	..	21.5	3.3	17.0	7.2	13.6
June	..	..	..	22.3	5.5	19.9	11.1	16.0
July	..	..	..	29.0	9.0	21.2	14.4	18.4
August	..	..	..	22.7	7.6	18.3	12.6	6.6
September	..	..	..	23.7	6.2	14.2	7.3	10.7
October	..	..	..	20.5	1.0	18.8	2.7	10.7
November	..	..	..	16.6	-2.5	15.8	2.6	9.2
December	..	..	..	13.0	-1.6	12.2	2.8	7.5
				18.8	1.52	14.4	6.0	9.83

°C UNDERGROUND TEMPERATURE AND SUNSHINE

1971	Underground Temperature (Mean)		Bright Sunshine
	30cm	100cm	Total Duration
January	5.5	7.2	23.5
February	5.5	6.8	44.9
March	6.0	6.8	93.2
April	8.3	8.3	116.5
May	12.2	10.4	221.9
June	14.4	12.7	151.7
July	18.2	15.5	251.7
August	17.2	16.1	114.7
September	15.8	15.5	164.7
October	13.3	14.2	127.6
November	9.1	11.4	94.6
December	8.1	9.3	14.9
	11.13	11.18	1,419.9*

*A daily average of 3.89 hours

RAINFALL

1971	Total mm	Difference from Average (80 years) mm	Greatest fall in 24 hours*		Number of Rain-days (0.2 mm or more)
			Amount mm	Day	
January	166.5	+62.7	22.4	22nd	22
February	17.7	-54.5	5.4	27th	7
March	66.7	-53.6	21.4	17th	14
April	61.4	-57.8	24.3	25th	12
May	41.0	-62.4	13.6	29th	14
June	150.6	+71.6	43.2	10th	16
July	31.6	-52.7	7.7	30th	7
August	138.8	+51.9	29.6	19th	23
September	33.9	-63.2	23.0	26th	10
October	120.0	+68.5	30.0	17th	12
November	85.4	-72.7	26.7	20th	16
December	55.1	-47.9	14.2	19th	11
	968.7	-43.3	43.2 on 10th June		164

*24 hours ended 9.00 a.m. (G.M.T.) next day.



TEMPERATURE AND HUMIDITY

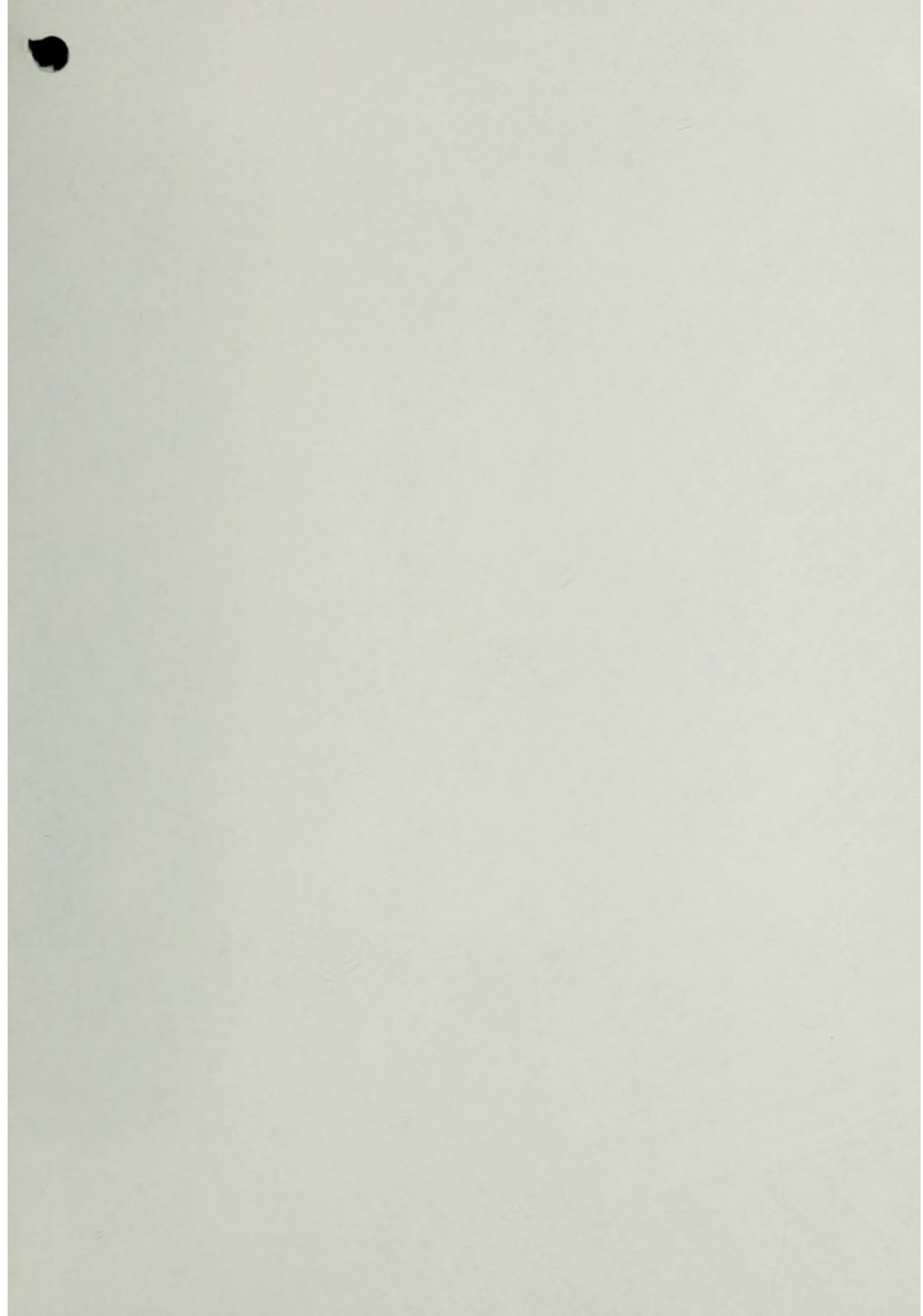
Month	1971	Temperature (°C)		Relative Humidity (%)
		Max	Min	
January		8.5	1.5	51.5
February		8.3	2.8	52.9
March		8.0	4.8	51.3
April		8.3	8.3	50.5
May		12.2	9.4	57.9
June		14.4	10.7	58.7
July		16.2	10.8	59.7
August		17.2	11.2	64.7
September		15.8	10.5	62.7
October		17.1	9.5	57.5
November		11.1	7.8	54.5
December		8.3	5.3	54.3
		14.1	12.2	57.4

Total 62.5 in precipitation

WIND

Month	1971	Wind Speed (km/h)	Wind Direction (°)		Number of Days with Wind Speed > 10 km/h
			Max	Min	
January		106.1	12.2	15.4	10
February		17.7	14.3	17.4	11
March		46.7	15.6	17.6	14
April		89.4	15.1	15.6	13
May		40.3	14.4	15.6	14
June		20.9	11.9	18.5	15
July		31.9	12.7	17.7	17
August		14.4	11.9	19.6	13
September		22.9	11.2	18.6	10
October		120.8	16.2	19.0	12
November		83.4	12.7	18.7	15
December		33.7	12.9	14.3	11
		674.2	12.1	15.2	164

Total 62.5 in precipitation



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