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Contributors

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GLOUCESTERSHIRE

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**GLOUCESTERSHIRE
COUNTY COUNCIL**

ANNUAL REPORT

**of the County Medical Officer
of Health and Principal School
Medical Officer _____**

1971



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TO THE CHAIRMEN AND MEMBERS OF THE HEALTH AND EDUCATION COMMITTEES

I have pleasure in submitting my Report for 1971 on the Health and School Health Services of the Administrative County.

Staff

Dr. R. E. A. S. Hansen, Divisional and District Medical Officer for Central Gloucestershire, was appointed by the Secretary of State for Health and Social Services to the Working Party on Collaboration foreshadowed in the Consultative Document. This invitation to help in shaping the future structure of the health services is a rare personal distinction which I am proud to record.

Mr. A. W. Johnston, the County Ambulance Officer, has accepted an invitation to become honorary editor of the official journal of the Institute of Ambulance Officers. The Department is honoured by this national recognition of a member of staff.

Dr. Stephen Knight, Divisional Medical Officer for the North Gloucestershire Area, and Medical Officer of Health to the constituent District Councils, retired on 30th April after 34 years service in the County. His extensive knowledge and gentle manner made him a delightful colleague, and I wish him and Mrs. Knight a long and active retirement.

Sir Kenneth Cowan, Chief Medical Officer of the Scottish Home and Health Department for ten years from 1954, died on 16th June, after a long and distinguished career in medical administration. He was County Medical Officer for Gloucestershire from 1937 to 1949.

Statistics

With the exception of 1967 when nine parishes were transferred to Gloucester City, the population of the Administrative County has risen steadily year by year. The Registrar General's estimates of population on 30th June, 1971, take account of the preliminary results of the 1971 Census and are, therefore, not comparable with those previously published for 1961-70, which were linked ultimately to the 1961 Census. The 1971 figure shows a fall of 360 compared with 1970.

The birth rate did not continue the fall from the peak in 1965 (19.8), increasing from 16.0 in 1970 to 16.2 per 1,000 population.

The infant mortality rate is the number of children dying under one year of age for every thousand born alive. The rate for 1971 (14.0) is the lowest ever recorded in the County, the previous record year being 1968 (14.5).

Whilst the death rate compares favourably with that for England and Wales, the percentage of the deaths due to cancer continues to increase and now exceeds 20%.

Co-operation with Statutory and Voluntary Services

Closer co-operation with the general practitioner and hospital services is evidenced by the increasing number of nursing attachments and the start of medical attachments to group practices; the rising number of hospital confinements undertaken by district midwives; and the growing acceptance of health visitors and district nurses onto the wards for liaison work. Reference is made below to joint arrangements which have been established during the year in respect of virus disease, family planning and ambulance liaison.

The support given by voluntary organisations to the Authority's health services also continues to increase. The following is by no means comprehensive but gives some indication of the variety of the organisations concerned and the range of their activities. The British Red Cross Society and the St. John Ambulance Brigade jointly administer, on behalf of the County Council, a loan service of sick room equipment from more than sixty depots in the County. The Hospital Car Service, organised by the British Red Cross Society, supplements the Ambulance Service by conveying at a nationally agreed cost per mile, about one-fifth of the total number of patients carried during the year. In the Chiropody Service the many thousands of appointments each year are arranged by voluntary Organising Secretaries.

The North Gloucestershire and Bristol Branches of the Family Planning Association administer, on an agency basis, all the family planning clinics in the County. Members of the Federation of Child Health Clinics undertake a variety of duties, including clerical work and the sale of foods, at more than a hundred

clinics. The Staywell Clinic for the detection of cervical cancer continues to be financed mainly by voluntary subscription. This unique pioneering venture has been described in a paper written for the British Medical Journal by Dr. Mary Seacome, a Senior Medical Officer in the Health Department, and Mrs. H. K. Paine, now County Home Help Organiser and Voluntary Services Liaison Officer in the Social Services Department.

In order to improve still further the cooperation between the statutory and voluntary bodies, the Health and Social Services Departments jointly organised a one-day conference which was held in November at the Gloucestershire College of Education. Over 150 delegates were addressed by Miss Muriel Skeet, authoress of the influential report, "Home From Hospital," which was also the title of the conference. As a direct result of this conference a working party was established to investigate further possibilities for mutual co-operation.

Dental Service

I commend to Members the comprehensive report of the Principal Dental Officer (Mr. J. F. A. Smyth). The report shows that, in spite of strenuous efforts by the whole dental service team, there is no overall improvement in the dental health of the children. Apart from increasing the fluoride intake, the only known effective way of reducing the amount of dental decay is by less frequent consumption of sugar and other refined carbohydrates. In face of powerful commercial and advertising interests, the possibility of reducing dental caries by changing dietary habits is necessarily limited. With the present establishment of dentists and dental auxiliaries, there is little margin for improving the inspection and treatment rates.

It thus seemed clear that, following the Authority's rejection of the proposal to fluoridate public water supplies, an attempt should be made to consider alternative methods of increasing the fluoride intake of children. A working party, under the Chairmanship of Mr. Smyth, was established during the year to consider alternative methods and to make recommendations.

Virus Survey

I referred in my last Report to a survey which had been planned to provide more accurate information on the incidence of virus diseases in the County. Twelve general practitioners, whose practices were considered to be representative of different parts of the County, agreed to take part and the survey began on 1st January, 1971. These twelve doctors agreed to try to send each week to the nearest Public Health Laboratory material such as throat swabs or blood samples, from four or five patients who appeared to be suffering from virus illnesses. In an attempt to get the specimens to the Laboratory as quickly as possible, arrangements were made with some of the many car users in the Department to transport the specimens if this could be done without adding materially to the length of the journeys. The results were reviewed in November when it was decided to continue the survey for a further twelve months but to confine it to respiratory illnesses and to reduce the weekly number of samples. From the information obtained from the survey it was possible to predict, in December, that there would be no large-scale epidemic of influenza during the winter.

Surveys of this kind are not new, but I do not know of one which has been attempted before on this scale, and it is an indication of the mutual goodwill which exists with the general practitioners and the Public Health Laboratories. The survey could not have been undertaken without the co-operation of many scores of people, and it is not feasible to thank them all individually. I would, however, like particularly to mention Dr. John Miles, the Chairman of the Local Medical Committee; Dr. A. E. Wright, the Director of the Public Health Laboratory in Gloucester; the Head of his Virus Unit, previously Dr. P. G. Higgins, and now Dr. G. E. D. Urquhart; Dr. P. G. Mann and Dr. H. R. Cayton, the Directors of the Bath and Bristol Laboratories respectively.

Health Centres

More progress was made in the year in planning and building health centres than in any previous year in the history of the Authority. The implementation of the Authority's policy naturally involves the

team-work of officers of many Departments, but I would like especially to pay tribute here to the energy and enthusiasm of my Deputy, Dr. Roy Barnes.

During the year the building of the Kingswood Health Centre began and preparations for the Stroud Centre were started. These two ambitious projects will together cost over £400,000 before they are completed in 1972 and 1973 respectively. Land adjacent to the clinic at Cinderford was purchased and the extensions leading to a fully equipped health centre will begin in the financial year 1972/73. Authority was given to erect a temporary health centre in Oldland Common as soon as a suitable site could be found, and agreement reached in principle to build a permanent health centre at Cowhorn Hill after 1974. A site for the Berkeley Health Centre was agreed and the planning of the Newent Health Centre, on a site already owned, was begun. Both these projects are scheduled to start in 1972/73. A small health centre for Lydbrook was accepted in principle and authority given to negotiate for a site. This project is not yet in the building programme but when completed it will be the first in the County to be built in a village.

Family Planning

In order to formulate recommendations for a more comprehensive service, the Health Department in June convened a Family Planning Liaison Committee. This Committee comprises consultant obstetricians ; representatives of the Family Planning Association ; the Secretary of the Local Medical Committee and doctors from Cheltenham, City and County Health Departments. In September, the Health Committee considered ways of expanding the family planning service and as a result of their recommendations the budget allocation for 1972/73 was greatly increased. This will enable many more mothers to receive free contraceptive advice and treatment when there are medical or social reasons for avoiding a further pregnancy.

Vaccination against Smallpox

In July the Department of Health and Social Security issued a circular advising that vaccination against smallpox need not now be recommended as a routine procedure in early childhood, and this recommendation has been accepted by the County Council. Policy in respect of any immunisation procedure can be rationally determined only by assessing the risks involved against the benefits likely to be obtained. It is well-known that primary vaccination against smallpox carries a very small but finite risk of serious complications. Until recent times, this risk was considered to be less than allowing a child to remain unprotected against the disease and so routine vaccination was encouraged. Due to the remarkable progress of the World Health Organisation's smallpox eradication programme, the chances of the disease being introduced into Britain have so diminished that the risks associated with routine vaccination have become disproportionate.

This change of policy is particularly noteworthy in this County because it was in Berkeley that Dr. Edward Jenner carried out the first vaccination in 1796. It is by the application of Jenner's discovery that the disease is now gradually being brought under control throughout the world.

Ambulance Service

In my Report for 1969, I commented on the success of a scheme, initiated by this Authority, of carrying an analgesic gas (Entonox) on ambulances. In 1971, the Department of Health and Social Security issued a circular to all Regional Hospital Boards commending the use of Entonox in the Ambulance Service and asking each Board to provide, when requested by Medical Officers of Health, consultant time to train ambulance men in the use of this apparatus. The lead set by this Authority two years ago has quickly gained general acceptance and is now officially commended by the Department. Furthermore, the beneficial results of this lead are not confined to this country. Dr. P. J. F. Baskett, Consultant Anaesthetist to the United Bristol Hospitals, who first approached the Health Department about the possible use of Entonox in the Ambulance Service, has received a letter from the Superintendent of the Ambulance Service in Wellington, New Zealand. The Superintendent writes in appreciation to say that, as a result of our joint article, the whole of the Wellington fleet has been equipped with Entonox. It is gratifying to note that a decision taken by this Authority has had a direct effect on the other side of the world.

In order to secure a more efficient use of ambulances and sitting-case cars, one of the two Station Officers at Cheltenham Ambulance Station was given the title Ambulance Liaison Officer and stationed at the General Hospital. The Hospital Management Committee welcomed the arrangement and provided all the necessary facilities, including an office in the out-patient department. The Officer informs himself of the transport requirements of the out-patients and since there is a direct line to the Ambulance Station and the position and destination of all the vehicles are known to the Radio Controller, the arrangement should result in a reduced waiting time for patients and a more economic use of the Service.

Health Education

One of the most important functions of local health authorities is to provide information to encourage healthier living. In addition to the advice given on a personal basis by health visitors and others, all authorities provide information on health matters by means of talks, posters, leaflets and displays. Comparatively little work has been done on attempting to measure the extent to which such information is taken up and acted upon by the public. It is therefore refreshing to read of three such attempts in the report of the Health Education Officer, Miss F. E. Fortnam, on page 28. The most ambitious of these was an attempt to measure in Dursley the success of a campaign on chronic bronchitis. Immediately before the campaign, a questionnaire was sent to 5% of the population chosen randomly from the electoral roll, and some six months later the same questionnaire was sent to another 5% random sample. The answers given in the questionnaires indicated, for example, that displays were the best way of making people aware of this campaign and that as a result of it, one in eight gave up smoking.

Actual and Proposed Legislative Changes

The Local Authority Social Services Act, 1970, came into operation on 1st April, 1971, when responsibility for those services named in the Act, including the home help and mental health services, was transferred to the new Social Services Committee and Department. The transfer took place smoothly, and the excellent relations which existed between the Health Department, the previous Children's and Welfare Departments, have continued with the Director (Mr. H. D. Nichols) and his staff. This mutual goodwill and understanding between those responsible for the health and social services will become even more important with the creation of area health authorities outside local government.

The Education Miscellaneous Provisions Act, 1970, was also implemented on 1st April, 1971, so that from that date Junior Training Centres (and schools in mental subnormality hospitals in the County) became the responsibility of the Education Committee and Department. This legislative change was welcomed almost everywhere and means that, for the first time in England, no child is excluded from the educational system. The medical examinations carried out as a policy of the Health Committee continue as part of the School Health Service and so the results of these examinations are still included in this combined Annual Report.

So far as the Health Department is concerned, the most important publication during the year was the Consultative Document on the Reorganisation of the National Health Service. The Document proposed the integration of the health services in a two-tier structure of ad hoc regional and area health authorities to come into operation on 1st April, 1974. The regional authorities are to be based on the present hospital board areas and the area authorities are to be co-terminous with the new county and metropolitan district councils set out in the White Paper published in February. The Document gave no indication as to the future of the School Health Service. The desirability of an integrated health service is now almost everywhere accepted, although many would have preferred the new service to be part of local government. A close relationship between the health and social services will become even more important in the future if these proposals are implemented.

Administrative Changes

Pending Dr. Knight's retirement, the opportunity was taken to review the sizes of the two adjacent Divisional Areas for health administration. Discussions took place with representatives of the District

Councils concerned and it was agreed that the Forest and Cotswold Divisional Areas could, with advantage, absorb the North Gloucestershire Division provided that Deputies were appointed. Under this new arrangement Gloucester Rural District became part of the Forest Division ; and Tewkesbury Municipal Borough, Charlton Kings Urban District and Cheltenham Rural District became part of the Cotswold Division. This reduced the number of divisions for health administration from five to four and ensured that the population in each of them was greater than one hundred thousand. The Government Order confirming these changes was issued with effect from 1st May.

In accordance with the recommendations of the Report of the Working Party on Management Structure in the Local Authority Nursing Services (The Mayston Report), a three-tier management structure will be provided in the Authority's nursing services. The top level will consist of a Director of Nursing Services and either a Divisional Nursing Officer or two Principal Nursing Officers, and these appointments will be made in 1972. The middle level comprises five Area Nursing Officers and four of these posts were filled during the year. In order to simplify communication with the social services, these five areas have been made as far as possible coterminous with the corresponding Social Services Areas. Recommendations on the composition of the lowest management level will await a review by the Director when she takes up her post. When completed, this new structure will be broadly similar to that which has already been implemented in the hospital nursing services, and so will assist integration.

With the guidance and support of the Management Services and Establishment Officer and his staff it has been possible to bring into one Child Health Section the administrative and clerical staff concerned with the child health clinics and the school health work. This merger, which will result in both improved gradings and overall economics, removes the arbitrary administrative distinction between the health services provided before and after school entry.

Programme Budgeting

Following acceptance by the Council in 1969 of the development of Planning, Programming, Budgeting (P.P.B.), the Highways and the Health Departments were invited to prepare their budgets in P.P.B. form as well as in the traditional form. This naturally involved a tremendous amount of extra work which was largely undertaken by my Deputy, Dr. Barnes. It was necessary, for example, to undertake a survey of nursing staff time to determine what proportion of their total time was allocated to each of their various duties. The P.P.B. budget transcends sectional boundaries and, when completed next year will indicate the amount spent on each objective of the Department rather than the amount spent as salaries, equipment, etc., in any particular section. This method of presentation should be of assistance to Members when making policy decisions. Gloucestershire is one of the very few local authorities to attempt this new form of budgeting, and the Health Department is proud to be associated with this pioneering work.

Venereal Diseases

Although the incidence of primary syphilis continues to fall, the numbers attending the special clinics with gonorrhoea show a disturbing upward trend. The figures for Gloucestershire are proportionately similar to those for England and Wales. There is unlikely to be any single reason for this recent increase, but one important factor is that gonorrhoea is now becoming more difficult to cure, because the resistance to penicillin of the germ which causes the disease is increasing.

The incidence of the venereal diseases can be reduced by providing better information on their dangers and mode of transmission, and by encouraging people to seek treatment as soon as they think they might be infected. The diseases arise only from sexual intercourse with an infected person, and the dangers of promiscuity are stressed by the staff in their talks in schools on the responsibility of citizenship. In an attempt to encourage earlier diagnosis and treatment, the Medical Officers of Health of Bristol City and Gloucester City have arranged a telephone answering service by which any caller can receive pre-recorded information on the location and times of the treatment centres. The numbers (Bristol 24416 and Gloucester 33432) provide direct coverage for virtually the whole of the Administrative County.

The Superintendent Health Visitor continued to act as liaison officer with regard to contact tracing.

Environmental Pollution

On the initiative of Dr. R. E. A. S. Hansen, Divisional and District Medical Officer for Central Gloucestershire, the Health Department, in June, 1970, convened a meeting at the Thornbury Rural District Council Office to consider the possibility of establishing some joint arrangement to study the causes and effects of environmental pollutants along the River Severn. The interest shown by Bristol University and by the Health and Planning Departments of the relevant major local authorities on both sides of the Severn was such that the Severnside Advisory Committee on Environmental Pollution came into being. The Secretary of the Committee is Mr. R. H. Craig, the County Public Health Officer, and the meetings of officers are held quarterly under the Chairmanship of Dr. A. J. Essex-Cater, the County Medical Officer for Monmouthshire. The first Annual General Meeting was held in October when members were also invited, and the Chair on that occasion was taken by the Chairman of the County Council. The objectives of the Advisory Committee are broadly to collect, collate and exchange information on environmental pollutants in the Severnside area and to study their possible biological effects.

Computer

Details of all births in the Administrative County have been recorded on the computer from 1st January, 1967, and from that date significant medical information, such as the presence of any congenital abnormalities and the number of completed immunisations, has been added to the records. I reported last year that the routine medical examination which took place during the first year of school life had been replaced by a pre-school examination arranged in the child health clinics during the months immediately prior to school entry. In the year now under review, the children born in the first few months of 1967 became eligible for their pre-school medical examination and a computerised form of the traditional school medical record card was brought into use for the first time. The credit for the design of this new record, which has been accepted by the Department of Education and Science, is due principally to Mr. F. H. Livesey, the Deputy Administrative Officer, in co-operation with the computer staff of the Treasurer's Department.

This system of using the computer both to store information from the child health and school health records and to initiate appropriate action, has become known as "The Gloucestershire Scheme" and is attracting an increasing number of enquiries and visitors from local authorities throughout the country and from overseas. It is encouraging to note that the system has been commended by the Local Authorities Management Services and Computer Committee in conjunction with the National Computing Centre and the Department of Health and Social Security for authorities which use an I.C.L. computer.

Acknowledgements

It is again a pleasure to thank the many people who made possible the year's work outlined in this Report. I am particularly grateful for the loyal service of the staff and for the support of the statutory and voluntary bodies concerned with the health services. Under Mr. Rogers' leadership, the excellent relationship with other Chief Officers and their Departments has continued. This relationship is particularly important with the Education Department because of the joint responsibility for the school health services, and I gladly record my appreciation for the help received during the year from Mr. M. G. R. Adams, the Acting Chief Education Officer. Finally, it is a pleasure to record my gratitude for the kindness and understanding of the Members of the Council.

ALLAN WITHNELL,

*County Medical Officer of Health and
Principal School Medical Officer.*

Quayside Wing,
Shire Hall,
Gloucester GL1 2HZ.

April, 1972.

STAFF

as at 31st December, 1971

County Medical Officer of Health and Principal School Medical Officer	....	....	....	A. Withnell, B.Sc., M.D., D.P.H.
Deputy County Medical Officer of Health and Deputy Principal School Medical Officer				R. Barnes, M.A., M.R.C.S., L.R.C.P., D.P.H.
Senior Medical Officer, Maternity and Child Welfare	....	....	....	Mary P. S. Seacome, M.A., B.M., B.Ch.
Senior Medical Officer, School Health Service				Marian Parkinson, M.B., B.S., D.P.H.
Senior Assistant County Medical Officer of Health and Departmental Medical Officer				M. J. Gryspeerdt, M.B., B.S., D.P.H.
Divisional Medical Officers	....	....	....	R. F. Barclay, M.B., B.S., D.P.H.
(also District Medical Officers of Health)				R. E. A. S. Hansen, M.A., M.B., B.Ch., D.P.H. A. T. Hunt, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H. W. A. Knox, M.B., B.Ch., B.A.O., D.P.H.
Assistant Medical Officers of Health and Departmental Medical Officers	....	....	....	*Katharine E. M. Allen, M.A., M.R.C.S., L.R.C.P. *Patricia A. Boulton, M.B., Ch.B., D.(Obst.) R.C.O.G. S. C. Buck, M.A., M.B., B.Chir., M.R.C.S., L.R.C.P., D.P.H. *Veronica A. Hall, M.B., Ch.B., D.R.C.O.G. *Ann L. Johnson, M.B., Ch.B. Margaret S. Jones, M.B., Ch.B. Olwyn K. Ockelford, M.A., M.B., B.Chir., M.R.C.S., L.R.C.P., D.C.H. Mary R. Paine, M.R.C.S., L.R.C.P. M. H. Ryder, M.R.C.S., L.R.C.P., D.P.H. Dorothy Sell, M.B., B.S. *Catriona F. Smith, M.B., Ch.B. *Mary E. Walters, B.Sc., M.R.C.S., L.R.C.P. Hebe F. Welbourn, M.D., D.C.H. Joyce D. Wood, M.B., M.S., D.R.C.O.G., D.C.H., D.P.H.
Principal Dental Officer	....	....	....	J. F. A. Smyth, L.D.S.
Deputy Principal Dental Officer	....	....	....	J. P. B. Pengelly, L.D.S., D.D.P.H.
Area Dental Officers	....	....	....	D. K. Stables, B.D.S. G. N. Willetts, L.D.S.
Orthodontists	....	....	....	G. D. Everard, L.D.S. *Mrs. H. C. Peace, B.D.S., L.D.S., D.Ortho. *Mrs. J. M. Popplewell, L.D.S.
Senior Dental Officers	....	....	....	A. C. Bloomfield, L.D.S. Mrs. P. A. Courthill, B.D.S. D. N. de Gruyther, L.D.S. Mrs. H. Frenkel, B.D.S. R. D. Jefferies, L.D.S. *N. Killingback, B.D.S.

Dental Officers	.....	*Mrs. M. E. Bell, L.D.S. *Mrs. S. Cole-Morgan, B.D.S. *W. M. Evans, B.D.S. Miss S. M. Hunt, B.D.S. Mrs. A. P. Hutton, B.D.S. Mrs. M. J. Leech, L.D.S. Mrs. P. J. Leggott, B.D.S. R. R. Merritt, L.D.S. G. F. Mills, B.D.S. G. H. Owen, B.D.S. *Mrs. B. Pitter, B.D.S. R. H. Salt, B.Sc., B.D.S., L.D.S. Miss M. M. Stocker, L.D.S. L. H. Stratford, L.D.S.
*indicates part-time		
Dental Auxiliaries	.....	5
Dental Health Education Officer	.....	Mrs. U. Y. Miles, A.L.A.M.
Dental Surgery Assistants	.....	(equivalent to 25.4 full-time)
County Dental Laboratory	.....	1 Chief Technician 2 Senior Maxillo-Facial Technicians 1 Technician 1 Apprentice
Superintendent Health Visitor	.....	Mrs. I. E. Lyle, S.R.N., S.C.M., H.V.
Health Visitors	.....	83 full-time, 19 part-time
Nurses assisting Health Visitors	.....	18 part-time
Nursing and Midwifery Superintendent	.....	Miss G. E. Brownhill, S.R.N., S.C.M., H.V., Q.N.
Area Nursing Officers	.....	Miss C. M. Allison, S.R.N., S.C.M., H.V., Q.N. Mrs. E. M. Meredith, S.R.N., S.C.M., H.V. Mrs. L. Midwinter, S.R.N., S.C.M., H.V. Miss A. R. Radcliffe, S.R.N., S.C.M., H.V., Q.N.
District Nurse/Midwives/Health Visitors	.....	14
District Nurse/Midwives	.....	91 and 9 part-time
Home Nurses	.....	S.R.N. 35 and 9 part-time S.E.N. 10
District Midwives	.....	9
Nursing Auxiliaries	.....	11
Orthopaedic After-Care Sisters	.....	2 and 4 part-time
County Public Health Officer	.....	R. H. Craig, M.I.P.H.E., M.R.I.P.H.H., M.A.P.H.I.
Assistant County Public Health Officer	.....	L. G. Norman, S.R.N., M.A.P.H.I.
County Ambulance Officer	.....	A. W. Johnston, A.I.A.O.
Deputy County Ambulance Officer	.....	G. P. Turnbull
Health Education Officer	.....	Miss F. E. Fortnam, S.R.N., S.C.M., H.V.
Deputy Health Education Officer	.....	Mrs. R. H. Rice, S.R.N., R.S.C.N., S.C.M., H.V.
Senior Audiology Technician	.....	A. J. Deacon, M.S.A.T., R.M.A.
Audiology Technician	.....	Mrs. R. Broomhead, M.S.A.T.
Senior Speech Therapist	.....	Mrs. M. D. Heaven, L.C.S.T.
Speech Therapists	.....	3 and 7 part-time

Chief Chiropodist	....	....	....	D. E. Boden, M.C.H.S.
Senior Chiropodists	....	....	....	7
Part-time Chiropodists	....	....	....	5
Administrative Officer	....	....	....	F. B. Wilton
Deputy Administrative Officer	....	....	....	F. H. Livesey, D.P.A.
Senior Administrative Assistants	....	....	....	R. Hayter, D.M.A. J. Yates, D.M.A.

DELEGATED AUTHORITY—BOROUGH OF CHELTENHAM

Medical Officer of Health	....	....	....	T. O. P. D. Lawson, M.D., D.R.C.O.G., D.P.H.
Deputy Medical Officer of Health	....	....	....	K. Matthews, M.B., B.S., D.P.H.
Assistant Medical Officer of Health and Departmental Medical Officer	....	....	....	Brenda G. King, M.B., B.S.
Area Dental Officer	....	....	....	P. B. Stone, L.D.S.
Dental Officers	....	....	....	J. B. Clarke, L.D.S. Miss K. M. D. Owen, B.D.S.
Dental Auxiliary	....	....	....	1
Dental Surgery Assistants	....	....	....	5 (equivalent to 3.1 full-time)
Senior Health Visitor	....	....	....	Miss M. Bevan, S.R.N., S.C.M., H.V.
Health Visitors	....	....	....	14
Nursing and Midwifery Superintendent	....	....	....	Miss M. J. Twemlow, S.R.N., S.C.M.
Assistant Superintendent	....	....	....	Miss M. E. Gabriel, S.R.N., S.C.M.
Home Nurses	....	....	....	17 (plus 2 part-time and 3 Bath Attendants)
Midwives	....	....	....	6 and 2 part-time
Health Centre	....	....	....	2 part-time Nurses
Chiropodists	....	....	....	7 part-time
Speech Therapists	....	....	....	Miss A. N. Fulford Miss R. K. Sneezum
Physiotherapist	....	....	....	Mrs. H. Sarma
Administrative Officer	....	....	....	W. H. E. Meakins

Area (in acres) :—

Population :—

Extracts from Vital Statistics :—

Rate per 1,000 population	....	....	....	....	....	....	....	....	16.2
Illegitimate live births per cent of total live births				....	....	....	....	....	5.5
Stillbirths	....	....	....	....	....	....	....	....	88
Rate per 1,000 total live and stillbirths				....	....	....	....	....	9.6
Total live and stillbirths	....	....	....	....	....	....	....	....	9,210
Infant deaths (deaths under 1 year)				....	....	....	....	....	127
Infant mortality rates									
Total infant deaths per 1,000 total live births				....	....	....	....	....	14.0
Legitimate infant deaths per 1,000 legitimate live births				....	....	....	....	....	13.7
Illegitimate infant deaths per 1,000 illegitimate live births	....	....	....	....	....	....	....	....	20.0
Neo-natal mortality rate (deaths under 4 weeks per 1,000 total live births)				....	....	....	....	....	10.1
Early Neo-natal mortality rate (deaths under 1 week per 1,000 total live births)				....	....	....	....	....	8.2
Perinatal mortality rate (stillbirths and deaths under 1 week combined per 1,000 total live and stillbirths)	....	....	....	....	....	....	....	....	17.7
Maternal mortality (including abortion)									
Number of deaths	....	....	....	....	....	....	....	....	3
Rate per 1,000 total live and stillbirths				....	....	....	....	....	0.3

1. Live Birth Rate

The Birth Rate for the year 1971 was 16.2 per 1,000 of the population, compared with 16.0 in 1970.

The following table shows the comparative figures for the past five years :—

	1967	1968	1969	1970	1971
Urban	17.7	16.8	15.6	15.0	15.5
Rural	18.5	17.7	17.4	16.5	16.5
Administrative County ...	18.2	17.4	16.8	16.0	16.2
England and Wales	17.2	16.9	16.3	16.0	16.0

After adjustment by the Area Comparability Factor (1.00) the Live Birth Rate (16.2) still exceeds that for England and Wales.

2. Death Rate

The Death Rate for the year was 10.3 per 1,000 of population, compared with 10.6 in the previous three years. After adjustment by the Area Comparability Factor (1.05) the Death Rate (10.8) compares favourably with the rate for England and Wales (11.6).

The total number of deaths in the County during 1971 was 5,796 and the chief causes are shown in the following table.

Cause	Total Deaths	Rate per 1,000 population	Percentage of Total Deaths
Heart and Circulatory Diseases	2,253	4.0	38.9
Cancer	1,183	2.1	20.4
Cerebrovascular Disease	803	1.4	13.9
Respiratory Diseases	776	1.4	13.4
Motor Vehicle Accidents	76	0.1	1.0
Other Accidents	89	0.1	1.5
Total	5,180	9.2	89.4

3. Infantile Mortality

The Infant Mortality Rate for the County was 14.0. The rate for England and Wales for the same period was 18.0.

Year	Urban		Rural		Whole County		Rate for England and Wales
	No.	Rate	No.	Rate	No.	Rate	
1962	79	24.4	108	17.1	187	19.6	21.7
1963	60	18.5	122	18.0	182	18.2	21.1
1964	55	16.5	121	18.2	176	17.0	19.9
1965	50	14.7	127	17.3	177	16.5	19.0
1966	52	15.6	116	16.0	168	15.9	19.0
1967	44	13.7	110	16.2	154	15.4	18.3
1968	50	16.2	90	13.7	140	14.5	18.3
1969	54	18.8	95	14.5	149	15.9	18.0
1970	42	15.2	96	15.3	138	15.3	18.2
1971	47	16.5	80	12.9	127	14.0	18.0

SECTION B

GENERAL PROVISION OF HEALTH SERVICES FOR THE COUNTY

1. Laboratory Facilities

(a) PUBLIC HEALTH LABORATORY SERVICE

The excellent relationship which has always existed with Dr. A. E. Wright at the Public Health Laboratory, Gloucester, has been maintained. We are also very indebted to Dr. H. R. Cayton, of the Bristol Public Health Laboratory, for his help in the Southern parts of the County. Arrangements were made to assist Dr. R. E. Hope-Simpson at the Public Health Virus Laboratory at Cirencester, by arranging for a health visitor to be available to him for collection of epidemiological specimens in connection with any influenza outbreak.

(b) PUBLIC ANALYST

The sessions of E. G. Whittle, Esq., B.Sc., F.R.I.C., were available to the Council as Public Analyst. His help during the year has been much appreciated.

2. Health Centres

HESTER'S WAY, CHELTENHAM

The Centre continues to provide medical and health services to the people on the estate.

THORNBURY

1971 was another busy year for the centre whose staff, including general practitioners and social services personnel, totalled 42 at the end of the year.

The number of patients attending general practitioners and receiving attention in the treatment room, approximately 31,000 and 7,500 respectively, showed increases over 1970.

General practitioner, child health, eye, chiropody and mentally handicapped assessment clinics continued throughout 1971, as did regular pre-school medical examination sessions and fortnightly visits by the mobile chest radiography unit. Orthopaedic and speech therapy clinics resumed in the autumn after some interruption, and December saw the first of a series of audiometry sessions to be held at the centre during school holidays. A monthly psychiatric out-patients clinic, introduced in January, became well established, and towards the year's end proposals for a geriatric clinic were being considered.

The centre appears to be providing a satisfactory and useful service to the community. It is pleasing to note the way in which all three branches of the existing Health Service are beginning to unite and function in one building, and especially pleasing to see the hospital services coming to the community in the health centre.

YATE

The population of Yate continues to rise. It was 9,300 in 1964 and 21,000 by the end of 1971. It is planned to rise to 30,000 by 1976 and to 35,000 by 1981.

This has the effect of increasing the pressure upon the new health centre ; the number of general practitioners has risen to eight, and the number of health visitors and nurses required to deal with the rising numbers continues to increase.

During the year the social workers moved from the centre and this allowed a re-allocation of rooms to provide more acceptable conditions for the audiometricians, speech therapists and chiropodists. It was necessary to allow a general practitioner the shared use of the local authority suite.

This large centre is now settling down. Its purposes are more clearly understood by the residents of Yate, and co-operation between the various branches of the services using the buildings is increasing.

3. Care of Mothers

(a) EXPECTANT AND NURSING MOTHERS

Ante-natal care was received by 6,166 mothers, and 1,339 of them attended local authority clinics. One domiciliary midwife held ante-natal sessions in her own premises, and eighty-one general practitioners held sessions in their surgeries.

Mothercraft and relaxation clinics were held at 32 centres. The numbers attending were :—

Booked for hospital delivery	1,829
Booked for home confinement	74
Total attendances	10,400

The annual courses in relaxation methods and psychoprophylactic methods of preparation for childbirth, which are attended by both health visitors and midwives, make it increasingly possible for mothers to have a choice of method of preparation for delivery.

(b) ARRANGEMENTS FOR CONFINEMENT

The decrease in the birth rate which commenced in 1966 would seem to have halted, Births for the past five years are shown below :—

	<i>Total Births</i>	<i>Live Birth Rate</i>
1967	10,118	18.2
1968	9,743	17.4
1969	9,505	16.8
1970	9,132	16.0
1971	9,210	16.2

Again the proportion of deliveries taking place at home has decreased, and this has been brought about by the increased availability of beds in consultant units for those who need them. Many patients return home approximately 48 hours after delivery, the domiciliary midwife accepting full responsibility for them under the direction of the general practitioner. This system depends on the adequate planning of the early discharge, and enquiries are made into the suitability of arrangements in all cases.

(c) CERVICAL CYTOLOGY

Facilities for the taking of cervical smears, together with pelvic examination, and examination for breast cancer, were again offered at fifteen centres. Total attendances were 3,305 of which 1,453 were making a first attendance; the remainder were returning for follow-up. Thirty-eight women were referred to gynaecologists by the general practitioners for further investigation of smears showing indications of cancer. A further 277 women were found to have conditions other than cancer which required further investigation, and were referred to their own doctors for this reason. An analysis of those attending by social class is given below :—

	1970	1971
Social Classes I and II	616	914
III	1,204	1,564
IV and V	831	827

Cancer of the cervix is more prevalent in women in the lower socio-economic groups, and cancer of the breast occurs more frequently in women in the higher socio-economic groups.

Those women under the age of 35 years are continuing to be called for repeat smears after five years has elapsed, and those over the age of 35 years will be recalled by the Central Register.

Staywell Clinic

The close relationship between the Health Department and the Gloucester City and County Appeal for the Prevention of Cervical Cancer, has continued throughout the year. Local authority medical officers have attended some sessions on the mobile unit, and the medical records have been handled in the Health Department. A total of 1,647 women were examined in the Staywell Clinic, thirteen requiring further investigation because of suspicious changes in the cervical smear. Eight were referred to their general practitioners because of breast anomalies, and 86 for other medical conditions.

It is apparent that factory visits are of increasing importance, and many employers in the County have been willing for women to be seen during their working hours. There is little doubt about the value of the service provided as many women who would not normally visit a static clinic are screened.

(d) FAMILY PLANNING

The Family Planning Association continues to act as agent for the local authority, and there is close liaison between staffs. The Association has free use of local authority premises and a fixed payment is made in respect of those patients whom it is felt should receive contraceptive advice on medical or social grounds. Clinics were organised by the Association at Cheltenham, Cinderford, Cirencester, Downend, Dursley, Gloucester, Lydney, Stroud, Tewkesbury, Thornbury and Yate.

The use of the mobile child health clinic as a family planning surgery has continued, and it regularly visited Moreton-in-Marsh, Sharpness and Wotton-under-Edge. The enthusiasm of the health visitor is an important contribution towards the successful use of the mobile unit, and this was reflected in Lydney by the ever increasing demand, so that a static family planning clinic became necessary and was opened during the year. Similarly, the visits to Moreton-in-Marsh have fulfilled a long-standing need in this area and a static clinic is about to be opened there. This has underlined the value of utilising the mobile vehicle as a means of testing the demand for additional family planning facilities in an area.

During the year plans were formulated to provide a better family planning service for the women of Gloucestershire. A Liaison Committee has been formed comprising gynaecologists, general practitioners, Family Planning Association representatives and medical officers from the three local authorities within the geographical county. Meetings were held and it was decided that a domiciliary service should be provided for those women who, for one reason or another, find it difficult to attend a clinic; also that a scheme should be implemented for the reimbursement of suitably trained general practitioners who provide contraceptive facilities for patients in special categories. Plans were also made for training general practitioners who are interested in joining the scheme, but who have not received any previous family planning instruction. Arrangements are being made for an intensive two day appreciation course to be attended by all health visitors and district midwives. In spite of the wide publicity given to population problems, there are still many people who are ignorant of family planning techniques, and unaware of the services available. For this reason emphasis will be placed on the family planning aspects of health education and many talks and discussions will be devoted to this topic.

4. Care of Children

(a) OBSERVATION REGISTER

Since the inception of the 'At Risk' register in 1963 it has become apparent that the use of pre and peri-natal factors to identify the children, who may eventually become handicapped and require special facilities, produced a very poor yield of the children who actually do need these facilities. Through the years the tendency has been to utilise the register as an Observation Register to ensure that children who show deviation from normal receive appropriate surveillance and, if necessary, treatment and facilities. During 1971, it was decided to discontinue the use of pre and peri-natal factors as a universal means of entry to the register. Only those children identified by paediatricians as needing special observation are registered in addition to those with congenital abnormalities, a history of rubella or relevant genetic history. The majority of children on the register should be notified by the health visitor reporting that they need special supervision because of social circumstances or the presence of early deviation from normal development—physically, emotionally or intellectually. The primary health care team is regarded as having the responsibility for ensuring that children receive attention appropriate to their needs, and the computerised reminder system is employed to ensure that no such child is overlooked. Children with marked deviation from normal are registered as potentially handicapped and assessed at the appropriate time with a view to educational treatment. The system facilitates the prediction of educational facilities which will be required. As the children born in 1967, who were the first to be registered by the computer, are now having school medical examinations, it should be possible to assess the success of the scheme by determining how many children are found at these examinations to have defects which were not previously detected.

(b) CONGENITAL ABNORMALITIES

Details of children with congenital abnormalities detected at birth are obtained from the birth notification forms, and all malformations noted are recorded on the computer. As significant medical conditions are also recorded in each child's history, it is possible to compare deviations from normal noted at birth, with those diagnosed as a later stage. Conditions such as hypospadias are frequently not noted at birth or commented on during the 6-8 weeks preceeding notification to the Department of Health and Social Security and neither are many cardiac and other internal anomalies. In view of this finding, it seems possible that the congenital abnormalities register based on conditions detected at birth, is deficient in presenting a true picture of the incidence of congenital malformations.

(c) CHILD HEALTH CLINICS

The appointments' system which was introduced in 1971, is working smoothly in most areas, and this is due to the efforts of the health visitors, who ensure that children attend clinics for a routine examination. Pre-school medical examinations are being carried out in the child health clinics, and approximately 65% of all children in the 4½ year age group were examined in the first year. It is hoped that this will increase to about 80% and will undoubtedly be of great benefit.

During the year, regular sessions were held at 107 static child health clinics. New clinics were opened at Huntley, Ruspidge and Yate (Abbotswood) to meet increasing needs in these areas. Unfortunately, it was necessary to close the static clinic at Innsworth because of a lack of suitable accommodation ; the area is now covered by a mobile clinic, which is not really satisfactory in view of the number of children involved.

The mobile child health clinic programme suffered a set back when one of the vehicles was involved in an accident and was out of action from July. However, it was still possible to make regular visits to 51 villages with the remaining vehicle, and temporary arrangements were made to cover the other areas.

No. of Children attending clinics :—

Born in 1971	5,290
1970	5,450
1967-1969	10,529
Total	21,269

(d) MOTHERS' CLUBS

Regular meetings were held by 25 Mothers' Clubs during the year. These Clubs have a mixed programme of social and educational events, at least half of the sessions being devoted to some aspect of health education.

(e) DISTRIBUTION OF WELFARE FOODS

Welfare Foods were available at 181 Child Health Clinics (fixed and mobile), 14 shops, the W.R.V.S. at Kingswood and 8 part-time offices, the latter involving paid assistance.

Distributions were :—

National Dried Milk (Tins)	8,061	(10,672)
Cod Liver Oil (Bottles)	3,909	(8,481)
Orange Juice (Bottles)	151,482	(162,848)
A. & D. Tablets (Packets)	6,469	(8,309)
Childrens Vitamin Drops (Bottles)	12,121	—

The 1970 figures are shown in brackets.

Childrens Vitamin Drops were introduced on 1st April, 1971, and Cod Liver Oil ceased to be supplied as part of the Welfare Food Service.

5. Infant Deaths

(a) NEO-NATAL DEATHS

There were 78 deaths during the first 28 days of life, 60 of these occurring during the first seven days. The primary causes of death were as follows :—

	0 - 6 days	7 - 28 days
Prematurity—		
Where given as a sole cause	8	1
Associated with respiratory distress	17	1
Associated with other conditions	1	3
Congenital Defects	11	4
Respiratory Distress and Atelectasis	9	2
Cerebral Haemorrhage	5	—
Haemolytic Disease	3	—
Asphyxia	3	1
Other	3	6
	60	18

(b) INFANT DEATHS

The deaths of 36 infants between the ages of one month and one year were recorded, as follows :—

	Place of Death	
	Home	Hospital
Respiratory Infections	2	7
Asphyxia	1	9
Congenital Defects	—	2
Cardiac Conditions	—	5
Gastro Enteritis	—	2
Cerebral Haemorrhage	—	1
Other	2	5
	—	—
	5	31
	—	—

(c) PREMATURE BABIES

There were 569 babies of birth weight 5 lbs. 8 ozs. or less during 1971. The figures below give details, those for 1970 being shown in brackets.

	Live	Stillborn	Total
Born in Hospital	490 (577)	50 (71)	540 (648)
Born at Home	28 (28)	1 (1)	29 (29)
	<hr/>	<hr/>	<hr/>
	518 (605)	51 (72)	569 (677)
	<hr/>	<hr/>	<hr/>
Died within 24 hours	36 (37)		
Died in 1 and under 7 days	14 (15)		
Died in 7 and under 28 days	4 (7)		
	<hr/>		
Total	54 (59)		
	<hr/>		

Of the 54 deaths, 32 were of babies weighing 3 lb 4 oz or less at birth. Careful selection for obstetric care ensures that the majority of premature babies are delivered in hospital. Specialist care is provided for premature babies after discharge from hospital.

(d) ILLEGITIMATE INFANT DEATHS

Of the 365 illegitimate births notified six were stillborn ; six illegitimate children died under the age of one year. The illegitimate infant death rate was 20.0 per 1,000 live births compared with 13.7 per 1,000 for the legitimate infant deaths.

(e) STILLBIRTHS

Of the 86 stillbirths notified, only four took place at home. The stillbirth rate per 1,000 total births for the past four years has been as follows :—

1968	11.8
1969	11.1
1970	10.6
1971	9.6

6. Home Nursing and Midwifery

(a) STAFF

At the 31st December, 1971, the staffing position was as follows :—

	Whole-time	Part-time	Total
<i>County</i>			
Superintendent	1	—	1
Area Nursing Officers (part time)	—	4	4
Nursing and Midwifery Staff	150	38	188
<i>Cheltenham</i>			
Superintendents	2	—	2
Nursing and Midwifery Staff	22	7	29
<i>Vacancies</i>			
County	6	—	6

(b) THE YEAR'S WORK

	County	Cheltenham	Total
General patients attended	10,463	1,522	11,985
General visits paid	328,161	53,163	381,325
Midwifery patients attended	5,454	712	6,166
Midwifery visits paid	61,142	6,780	67,922
Sessions attended	7,845	80	7,925
Talks given (in addition to those given at sessions)	133	—	133

The work in general practitioner units has continued. A new scheme was started with Almondsbury Hospital in the autumn. This is the fourth scheme now in operation. Thirty midwives delivered and nursed 319 mothers during the year in these units.

Five hundred and eighty-five mothers were delivered at home.

A detailed work survey was carried out in September. When the final results are known they will provide a valuable source of information for future action and development.

(c) COURSES

	Staff attending
Ante Natal preparation	44
First Line Management	5
Middle Management	1
General Nursing	25
Health Visiting	1
Statutory Midwifery Refresher Courses	28
Study Days and Conferences	52
First Aid (Advanced)	8

The Ante Natal Preparation and General Nursing Courses were held at Sandywell Park, one of the County's Conference Houses. These are annual courses, arranged by one of the Area Nursing Officers, to suit the particular needs of our own staff.

(d) TRAINING

(i) Midwifery Part II

44 Student midwives completed their training with us during the year. Plans are being laid down now for the community programmes within the new single-period training of the future.

(ii) *District Nurse Training*

THE SEVERN VALLEY TRAINING SCHOOL.—The scheme is run in conjunction with Gloucester City, Worcester City and Worcestershire. This year the District Nurse Training for State Enrolled Nurses was included in the training programme.

During the year eight of our own State Registered Nurses completed the training. Seven were successful. At the end of the year twelve Gloucestershire candidates were in training.

OBSERVATION VISITS.—For several years students and pupils in general training have accompanied members of the staff for a day to observe the range of work undertaken in the community.

This year we have commenced a scheme with Gloucestershire Royal Hospital for county nurses to spend the mornings for a week, in the wards, to observe new methods of treatment in hospital care.

(e) ATTACHMENTS

The programme for the attachment of local authority staff to general practice has continued. There are now 71 members of staff attached to practices involving 119 general practitioners.

Cross boundary visiting by attached staff takes place with four neighbouring authorities.

One member of the general nursing staff has been attached to Gloucestershire Royal Hospital as a liaison officer in matters concerning the early discharges of general patients. We hope to extend the work in this direction.

(f) INCONTINENCE PADS

Incontinence pads and plastic pants are provided for both ambulant patients and those confined to bed.

Number of pads for use in bed	150,000
Number of pads for use with pants	158,000
<hr/>			
Total	308,000
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The number of pads provided greatly exceeded that of the previous year (215,000). Two thousand pairs of plastic pants were issued.

(g) SPECIALISED STAFF

Two midwives trained in Premature Baby Care continue to work closely with the Premature Baby Unit at Southmead Hospital. One nurse specialises in the care of sick children at home.

(h) "HOME FROM HOSPITAL" CONFERENCE

A day conference to discuss Miss Muriel Skeet's Report 'Home from Hospital' was held in November. This was organised jointly with the Social Services Department and attended by 150 delegates from the hospital, community and voluntary fields. Miss Skeet herself gave the opening address. Discussion groups considered local problems and made recommendations. A Working Party is now in operation to study the recommendations and consider their implementation.

(i) LOCAL SUPERVISING AUTHORITY

Notifications of Intention to Practice as Midwives

Employed by Hospital Management Committees	....	170
Employed by County Council	....	126
In private practice	....	5

Medical Aid

Hospital	....	5
Domiciliary	....	64

(j) PUERPERAL PYREXIA

	Home	Hospital
Breast infections	3	—
Urinary tract infections	1	1
Other	2	—
Pyrexia of unknown origin	9	—

(k) MATERNAL DEATHS

Investigations into five maternal deaths were carried out for the Confidential Enquiry.

7. Registered Nursing Homes

At the end of the year there were ten nursing homes registered in the County. These homes provide 177 beds for general cases.

8. Health Visiting

At the end of 1971 there was little change in the number of staff employed in the Health Visiting Service.

Superintendent Health Visitor	1
Area Nursing Officers (part time)	4
Health Visitors (full time)	84
Health Visitors (part time)	19
District Nurse/Midwife/Health Visitors	15
State Registered Nurse Assistants to Health Visitors	18
<i>Movement of Staff, 1971</i>	
	Arrivals Departures
Area Nursing Officers	4 —
Health Visitors	22 16
District Nurse/Midwife/Health Visitors	— 3
State Registered Nurses	6 5

There has been an increase in the number of Health Visitor/General Practitioner attachments, and by the end of the year 77 Health Visitors were attached to 131 General Practitioners. This is to be encouraged as it is constantly extending the Health Visitor's role in the community. The individual skills of the Health Visitor are not peculiar to health visiting. It is the combination of all her skills which is unique and fits her for the role of the key worker in the family. Her work is preventive and educative; it extends from advice on family planning to the care of the aged.

Of primary concern to the Health Visitors are the emotional needs of those she visits, particularly the pre-school child. Food, warmth and shelter may be adequate, but equally important are love, companionship, stimulation, play and the need to be part of a family. In some homes parents are unable to communicate with their children and the love they can give is not sufficient for that particular child's needs. The child enters school lacking self confidence, socially naive, not knowing how to talk and play with his contemporaries and often very unhappy. In one area a playgroup for children whose parents are unable to provide them with the loving care they need has been organised by a Health Visitor and voluntary helper. It is run by the voluntary helper who occasionally has the help of other volunteers. The prime worker is herself a trained nurse, wife of a doctor, and mother of four. Play material and equipment have been generously donated. Most of the children are collected from their homes by the voluntary workers and brought to the local Health Services Clinic where the playgroup is held. After only three months the ability to express themselves has greatly improved, their vocabulary has increased and they are able to concentrate for longer periods of time.

It is hoped eventually to involve the children's mothers in the playgroup to help them gain insight into their children's needs.

This is a very worthwhile project and we are grateful to the volunteers who run this group.

An equally important part of the Health Visitor's work is collaborating with her colleagues in the hospital and social services department.

After preparatory discussions with the hospital staff, including Consultants and Medical Social Workers, a Health Visitor was attached to the Cobalt Unit at Cheltenham General Hospital on the 5th July, 1971, at first part-time, but now full-time.

In the Unit the Health Visitor has formed a close working relationship with all the staff, nursing, technical, clerical and medical, and has acquired a knowledge of the various treatments. She has also been introducing herself to patients, explaining to them what her functions are, and generally bonding good relationships. She attends ward rounds with the Consultants and the nursing staff, meets and talks with out-patients and works closely with the Medical Social Worker in the interests of patient care.

In the community, the specialist Health Visitor visits patients after they have been discharged from hospital and she finds that at least two visits are necessary, and then she informs her health visitor colleagues of the patients in their area. These visits are very much appreciated by the patients and by their relatives. Her work is mainly advisory, communicative and supportive. This is just a beginning in a specialised branch of medicine. It is believed that this is the only Cobalt Unit in the country which has a Health Visitor attached to it and one hopes that when this work has been fully developed that other Units and other types of Units will follow this lead.

All concerned, the Consultants, the nursing staff, the Health Visitor, the Medical Social Worker and the patients are very happy about this relationship which we hope will continue to develop.

Health Visitors continue to attend In-Service Refresher Courses and National Refresher Courses through the generosity of the County Health Committee and we are grateful to them.

There has been an all round increase in the work load of the health visiting staff during the past year and this is shown in the following figures.

VISITS PAID BY HEALTH VISITORS

<i>Persons Visited :</i>		<i>Total Visits :</i>	
Expectant Mothers	2,080	Under 5 years	126,648
Children born 1971	8,655	Aged	11,419
Children born 1970	9,219	Hospital after care	688
Children born 1966-1969	21,265	Mental health	2,658
Foster children and adoption	567	School children	2,947
Care of aged (1,588)	3,815	Others	8,823
Hospital after care (243)	346	Ineffective visits	19,181
Mentally disturbed persons (215)	834		
Tuberculosis households	178		
Other infectious diseases	101		
School children-Home visits	3,600		
Others	4,880		
Total	55,540	Total	175,364

Figures in brackets are visits made at the request of family doctors.

Consultations

Cytology	....	....	....	127
Relaxation and Mothercraft			....	1,188
Mothers' Clubs		....	....	126
Others, visits to Shire Hall and Superintendent	....	....	....	806

Health Education Talks :

	No. of Talks	Audiences
Parentcraft	1,642	11,678
Schools Smoking Talks	143	5,848
Schools Parentcraft	442	6,474
Schools Others	150	4,227
Colleges	1	26
Youth Clubs	20	302
Uniformed Groups	19	349
Adult Organisations (Women)	116	2,871
Adult Organisations (Men)	5	152
Adult Organisations (Mixed)	24	1,093
Total	2,562	33,020

Nurse Assistants to Health Visitors :

Clinics	Sessions
Ante-Natal	139
Chest	47
Child Health	600
Cytology	165
Immunisation	357
Ophthalmic and Vision Testing	822
School Medical Inspections	897
Hygiene Inspections	404
Others	689
Total	4,120

Following notice from medical inspectors at ports new immigrants are visited as soon as possible after their arrival by health visitors, who in spite of some language difficulties have been able to give information about the health services and to encourage chest X-ray examinations, where appropriate.

The countries issuing the passports were as follows :—

(a) Commonwealth Countries			(b) Non-Commonwealth Countries			Total
(i) Carribbean	....	6	(i) European	....	15	
(ii) India	....	11	(ii) Other	....	9	
(iii) Pakistan	....	—			
(iv) Other Asian	....	13				
(v) African	....	7				
(vi) Other	....	6				
		—			—	—
		43			24	67

In 1970, 82 notices were received in respect of 59 immigrants from Commonwealth Countries and 23 others.

HEALTH VISITORS' TRAINING COURSE

Twenty-three students took the written examination in June and subsequently followed a ten week period of supervised practical work in the area of their sponsoring authority. The course terminated with the oral examination on the 8th September.

All students successfully passed the final examination, three with distinction, seven with credit and were awarded the Health Visitor's Certificate of the Council for Education and Training of Health Visitors.

Dr. Ian MacQueen, Medical Officer of Health, Aberdeen, completed his final year as external examiner and reported that the high standard of the course had been maintained and that its one hundred per cent pass with three distinctions were indications of the standard achieved.

Seven students were appointed as full-time health visitors in the county, one being appointed to work in Cheltenham. Fifteen students returned to work in other local health authorities and one, sponsored by World Health Organisation, returned to Zambia to carry out public health work.

Twenty-four students were accepted for training in the present course which commenced on 13th September. Five were selected under the County's scheme, eighteen were sponsored by other local health authorities and one student from Cyprus was sponsored by the World Health Organisation.

9. Vaccination and Immunisation

VACCINATION OF PERSONS UNDER AGE 16 COMPLETED DURING 1971

TABLE 1—COMPLETED PRIMARY COURSES

Type of Vaccine or Dose	Year of Birth					Others under age 16	Total
	1971	1970	1969	1968	1964-1967		
1. Quadruple D.T.P.P. ...	—	1	—	1	—	—	2
2. Triple D.T.P. ...	300	6,151	2,050	589	593	8	9,691
3. Diphtheria/Pertussis ...	—	—	—	—	—	—	—
4. Diphtheria/Tetanus ...	3	79	43	27	248	30	430
5. Diphtheria ...	—	2	2	—	2	—	6
6. Pertussis ...	—	1	—	—	—	—	1
7. Tetanus ...	—	1	6	—	6	445	458
8. Salk ...	1	4	4	1	—	—	10
9. Sabin ...	308	6,199	2,127	632	929	3,907	14,102
10. Measles ...	1	2,245	2,216	939	1,465	113	6,979
11. Rubella ...	—	—	—	—	25	2,896	2,921
12. Lines 1+2+3+4+5 (Diphtheria) ...	303	6,233	2,095	617	843	38	10,129
13. Lines 1+2+3+6 (Whooping Cough) ...	300	6,153	2,050	590	593	8	9,694
14. Lines 1+2+4+7 (Tetanus) ...	303	6,232	2,099	617	847	483	10,581
15. Lines 1+8+9 (Polio) ...	309	6,204	2,131	634	929	3,907	14,114

TABLE 2—REINFORCING DOSES

Type of Vaccine or Dose	Year of Birth					Others under age 16	Total
	1971	1970	1969	1968	1964- 1967		
1. Quadruple D.T.P.P. ...	—	—	—	—	—	—	—
2. Triple D.T.P. ...	—	157	425	187	612	73	1,454
3. Diphtheria/Pertussis ...	—	—	—	—	—	—	—
4. Diphtheria/Tetanus ...	—	—	16	16	9,427	371	9,830
5. Diphtheria ...	—	—	1	—	14	2	17
6. Pertussis ...	—	—	—	—	—	—	—
7. Tetanus ...	—	5	9	18	131	3,873	4,036
8. Salk ...	—	—	—	—	—	—	—
9. Sabin ...	—	125	318	120	10,063	4,464	15,090
10. Lines 1+2+3+4+5 (Diphtheria) ...	—	157	442	203	10,053	446	11,301
11. Lines 1+2+3+6 (Whooping Cough) ...	—	157	425	187	612	73	1,454
12. Lines 1+2+4+7 (Tetanus) ...	—	162	450	221	10,170	4,317	15,320
13. Lines 1+8+9 (Polio) ...	—	125	318	120	10,063	4,464	15,090

TABLE 3—SMALLPOX VACCINATION

Numbers	0-3 months	3-6 months	6-9 months	9-12 months	1 year	2-4 years	5-15 years	Total
Vaccinated ...	21	18	27	63	2,742	637	319	3,823
Re-vaccinated ...	—	—	—	—	—	34	990	1,024

National policy regarding smallpox vaccination was changed from July, 1971, as a result of which, vaccinations are no longer given as a routine. The above figures, therefore, show a decrease over previous years' figures.

TABLE 4—TUBERCULIN TESTS AND B.C.G. VACCINATIONS

A. CONTACTS :

Skin Tested	....	....	....	....	517
Found Positive	....	....	....	....	88
Found Negative	....	....	....	....	272
Vaccinated ....	....	....	....	....	246

B. SCHOOL CHILDREN AND STUDENTS :

Skin Tested	....	....	....	....	9,617
Found Positive	....	....	....	....	830
Found Negative	....	....	....	....	8,723
Vaccinated ....	....	....	....	....	8,655

10. Ambulance Service

(a) CASES CARRIED AND MILEAGE IN 1971 :—

Patients					Mileage				
(1) Ambs.	(2) Buses	(3) Cars	(4) H.C.S.	(5) Total	(1) Ambs.	(2) Buses	(3) Cars	(4) H.C.S.	(5) Total
83,881	113,822	51,389	65,271	314,363	799,987	418,460	364,020	798,605	2,381,072

The corresponding totals for 1970 were 263,146 patients and 2,016,970 miles, an increase in 1971 of 19.5% and 18% respectively. The 1970 totals were affected by industrial action during the latter quarter of that year but after allowing for the number of patients who would usually have been conveyed, the 1971 increase remains in excess of 12%.

Although increased demands for transport have been received from all sources these have been most noticeable in respect of hospital day centres. Where expansion of these facilities has taken place the Service has been working under increasing pressure and has at times had difficulty in meeting the demands.

The Hospital Car Service organised by the British Red Cross Society, has continued to give valuable assistance and conveyed 12,611 more patients than in 1970. In certain parts of the county more use could have been made of the Service had drivers been available.

(b) PERSONNEL

Staffing at the end of 1971, excluding H.Q. Staff (six) was as follows :—

3 Superintendents	17 Sub Officers
14 Control Operators	132 Ambulancemen
6 Station Officers	2 Ambulancewomen

(c) VEHICLES

Vehicle strength at the end of the year, including reserves :—

37 Ambulances	19 Sitting case vehicles
19 Bus-type vehicles	4 Equipment vehicles

Included in the above totals are four ambulances which have been retained as additional reserves to replace vehicles out of service for major overhaul.

New sitting case vehicles were equipped with stretcher trolleys and are capable of dual-purpose use for either sitting or stretcher cases.

(d) TRAINING

Four induction courses for new entrants, three refresher courses, one local instructor course, and one control course were held at Ullenwood.

Nineteen men were seconded to the Regional Training School and all were successful.

Eight members of the Service obtained passes in the Graduate Examination of the Institute of Ambulance Officers.

Plans were being finalised at the end of the year for the secondment of ambulancemen to Frenchay Hospital for advanced training. Although the proposed arrangements will be subject to review as the training progresses it is planned to send three men for one year together with a further three men each month. They will at all times be available to the Service for emergency calls and at the discretion of Ambulance Control may be accompanied on these calls by a Doctor or a Nurse. An acknowledgement must be made of the part played by Dr. Peter Baskett and Sister Barr in arranging this training and of the willing co-operation given by the many other staff of Frenchay Hospital who will assist with the project. Discussions were also commenced with the staff of Cheltenham General Hospital for similar arrangements to be made.

Sixty-seven talks have been given to voluntary organisation and other bodies and four full first aid courses were provided for Departmental First Aiders and Nursing Staff.

(e) EQUIPMENT

In view of difficulties encountered with existing equipment for setting up blood or plasma drips an improved drip stand was developed in association with Childerhouse Ltd. All ambulances were equipped with spinal boards.

On 29th December, almost two and a half years after the introduction of Entonox equipment in Gloucestershire Ambulances, the Department of Health and Social Security issued a Circular giving advice on its use by Ambulance crews. This closely followed the instructions and training methods used by this Authority.

Studies were commenced into the possibility of purchasing radios, vehicles and uniforms jointly with other Ambulance Services through the Wiltshire Purchasing Consortium.

(f) STATIONS

With the completion of the section of the M.5 between Eastington and Almondsbury in November, cover is now provided for 79 miles of motorway. Of this total 16 miles are serviced jointly with adjoining Ambulance Services. The Stations providing first line cover are Newent, Tewkesbury, Cheltenham, Stroud and Almondsbury. Due to the considerable distance between Stroud and Almondsbury, and the difficulties and danger, of crossing from one carriageway to the other, provision is being made for a new Station to be built near to the Falfield intersection. This will enable a quicker response to be made to incidents on the southbound carriageway to Almondsbury and the northbound carriageway to Stroud-water.

11. Prevention of Illness, Care and After-Care**(a) CHIROPODY**

The report of this service continues to be depressing. Although at the beginning of the year it was possible to provide a service over the whole County, by the end of 1971 two chiropodists had resigned and the vacancies had not been filled. One area had been without a service since July. The demand for chiropody continues to rise, however, and steps were taken to increase productivity and to ascertain how staff could be attracted to the County.

The Management Service and Establishment Department has given valuable help and it is hoped that significant changes will take place in 1972.

NUMBER OF PERSONS TREATED, 1971

	Women (60 & over) Men (65 and over)	Expectant Mothers	Handicapped Persons	Total	Percentage increase/ decrease	Number on Registers at 31st December
County Area						
1971	8,863	8	129	9,000	+20.7	8,446
1970	7,421	19	92	7,532		8,410
Cheltenham						
M.B. 1971	829	—	11	840	+15.7	940
1970	986	1	7	994		895
Totals 1971	9,692	8	140	9,840	+15.4	9,386
1970	8,407	20	99	8,526		9,305

NUMBER OF TREATMENTS

	At Clinics and Centres	Welfare Homes	In Patients' Homes	In Chiropodists' Surgeries	Total	Percentage Increase
County Area						
1971	23,140	4,158	1,746	—	29,044	10.1
1970	21,043	3,260	2,075	—	26,378	
Cheltenham						
M.B. 1971	801	75	149	1,358	2,383	—
1970	1,045	158	151	1,036	2,390	
Totals 1971	23,140	4,158	1,746	1,358	31,427	9.2
1970	22,088	3,418	2,226	1,036	28,768	

(b) HEALTH EDUCATION

The project about Chronic Bronchitis which started in September, 1970, in Dursley was completed during the year by conducting a follow-up survey during June, 1971. The project had two objectives.

- (i) To provide as much information as possible about chronic bronchitis, the nature of the disease, causes, and possible prevention.
- (ii) to discover how much notice is taken of publicity of this nature ; how the knowledge of the general public can be improved and whether attitudes or behaviour patterns can be modified.

To achieve the second objective a survey was conducted among a 5% random sample of the population taken from the electoral roll asking them to complete a questionnaire. The questionnaire was planned with a follow-up survey in mind and the first section contained questions relating to mortality, morbidity, environment, causes, disablement and prevention. The statistical basis used was figures from 1968

Annual Report on "The State of Public Health" by the Chief Medical Officer. A system for marking the answers was devised. Exactly the same questions and the same system of marking was used in the follow-up survey so that any increase in knowledge would show by an increase in marks.

In the first survey the marks achieved for correct answers was 51.0%

In the second survey the marks achieved for correct answers was 64.8%.

These percentage changes are statistically significant and would appear to provide clear evidence that our health education is effective. Subsequent to this success the project has been mounted in other towns including Thornbury, Patchway, Yate and Stroud.

The items which showed a significant increase in knowledge included :—

That working conditions played an important part, from 43.0% to 55.7%.

That tobacco smoking was the most important cause, from 25.8% to 33.3%.

That chronic bronchitis could permanently disable people, from 72.4% to 82.2%.

That it could not be cured, from 37.0% to 49.4%.

The number who thought prevention was possible rose from 60.0% to 78.0%.

Knowledge about preventive measures rose in all sections, the most significant being :—

Stopping smoking as the most important measure.

Avoiding atmospheric pollution.

The futility of depending on medical skill for preventive measures.

The second part of the follow-up questionnaire contained questions about the campaign. 51.1% were aware that there had been a campaign and 32.7% remembered something about it.

1. Seeing displays were best remembered 47.7%
2. Reading a leaflet or listening to a talk came second 42.0%
3. Reading about the campaign in a newspaper 37.0%.

The last part enquired whether the campaign had led to any change in habit. Of those who remembered the campaign 50.9% said "yes," which was 16.0% of the whole sample. 12.0% of the whole sample had given up smoking in response to this campaign.

A further project of evaluation was linked with the displays which are erected in the foyer of Quay-side Wing, Shire Hall, every month before they are sent out to different sites in the county. In order to evaluate the impact they make, a small survey was carried out amongst members of staff working in this Wing. A 25% random sample was taken from the internal telephone directory, the sample contained 46 names. All had noticed the displays, 41 were interested, 20 people had taken some positive action because of the displays and 11 knew of others who had done so. These results are very encouraging, both from the increase in knowledge and the evidence of a positive change in behaviour.

For 1971 the aspect of health chosen by the Health Education Advisory Committee was Family Planning. It was felt that the information about family planning facilities was not sufficiently available and that for this reason many people fail to receive the contraceptive advice they need. A small survey was carried out by the Medical Officers of the Family Planning Association Clinics to discover why people attend Clinics when they do, what is the pressure which encourages them to attend at a particular time and why they have not attended before. It was felt that if these facts were known it would help to determine better methods of Health Education. This survey is in the process of being analysed. The first campaign about family planning was launched in Lydney to coincide with the opening of a new Family Planning Association Clinic. The publicity was well received with displays erected in the library, an empty shop window, the Hospital and several factory canteens. Five organisations within the town requested a talk on the subject. This campaign will continue in other towns during 1972.

Displays on a variety of health topics including hypothermia, aspects of safety, venereal diseases, tetanus, first aid, aspects of child care, etc., have continued to be erected in sites throughout the County. The number of general medical practitioners who take part in this programme has increased.

Cigarette Smoking and Health

A special effort to give publicity about cigarette smoking and health was made in September in conjunction with the national campaign. The national campaign included the second World Conference on Smoking and Health organised by the Health Education Council, the appearance of warning notices printed on all cigarette packets, and a programme of short films shown on I.T.V. Talks and discussion groups in primary and secondary schools and in Youth Clubs continued throughout the year.

A float was decorated for inclusion in the Mayoral procession in Cheltenham, the theme being "An effective family service". This was a joint effort with the Social Services Department.

The usual in-service training and study days have been organised but it was unfortunately not possible to repeat the "Speaking with Confidence" Course due to financial restrictions.

				TALKS GIVEN			
Parentcraft Classes	....	....	....	1,885	Schools Parentcraft	....	492
Adult Organisations	....	....	....	510	Smoking and Health	....	214
Youth Organisations	....	....	....	379	Other Subjects	....	150
					Film Shows	....	251

(c) HOME NURSING REQUISITES

The British Red Cross Society and the St. John Ambulance Brigade continue to act as the County Council's agents for the temporary loan of articles. The two organisations maintained 62 depots and the voluntary effort expended in administering these depots is a source of much satisfaction. Articles which are required for long periods or permanently are supplied through the Department.

(d) RENAL DIALYSIS IN THE HOME

The principal function of the kidneys is to purify the blood. Many people with diseased kidneys are able to enjoy an otherwise normal life if their blood is purified artificially by passing it through a kidney machine about three times per week. This treatment, which is called renal dialysis, must first be carried out in hospital, but in suitable cases it can be continued at home. As well as being more convenient for the patient, home dialysis frees a hospital bed and lowers ambulance transport costs. The kidney machine is loaned by the hospital but a specially adapted room must be provided in the patient's home. These adaptations are the responsibility of the local authority and the work is supervised by a member of the County Architect's staff and the appropriate Divisional Medical Officer.

The local authority is also responsible for home adaptations for blind, deaf and physically handicapped persons, and a charge is made on a sliding scale depending on the person's income. The same sliding scale was applied to the cost of installing a kidney machine in the home, but this policy was reviewed following the transfer to the Social Services Committee of responsibility for most other types of home adaptation. It was possible after the transfer to make a clearer distinction between adaptations for medical reasons (which remained the responsibility of the Health Committee) and adaptations for social reasons (which became the responsibility of the Social Services Committee). The view was taken that the installation of a kidney machine is for a purely medical reason so that, as for all other provision under the National Health Service, there should be no charge based on assessment of income. The patient must, however, still pay that part of the cost of any adaptation which substantially improves the capital value of his house. By the end of the year ten machines had been installed since the scheme commenced in February, 1970.

SECTION C

DISEASES

1. General

Notifications of infectious diseases during the year are set out in Table II at the end of this report.

2. Tuberculosis

Summary of formal notifications during the year :—

	Formal Notifications														
	Number of Primary Notifications of new cases of tuberculosis														
	0-	1-	2-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	Age un-known	Total
Respiratory, Men	—	—	—	—	2	—	4	4	3	6	8	2	1	—	30
Respiratory, Women	—	—	—	—	1	—	2	2	3	4	2	2	1	1	17
Non-Respiratory, Men	—	—	—	—	1	—	—	3	—	1	1	1	—	—	7
Non-Respiratory, Women	—	—	—	1	1	—	—	1	1	2	2	1	—	—	9

Persons removed from the register during year 1971 :—

Pulmonary	Non-Pulmonary	Total
55	25	80

MASS RADIOGRAPHY SERVICE

The Organising Secretary of the Mass Radiography Service, South Western Regional Hospital Board, has provided the following figures for 1971 in respect of sessions held in Gloucestershire.

	Men	Women	Total
Total X-rayed	7,144	7,568	14,712
Abnormalities detected	127	67	194
No diagnosis yet received	1	—	1
Abnormalities—Active Tuberculosis	4	1	5
Requiring Observation	—	—	—
Healed Tuberculosis	14	10	24
Non-tuberculous Cases	109	56	165

BRISTOL CHEST CLINICS—SOCIAL WORK

Arrangements with the Bristol Corporation whereby Gloucestershire residents who attend the Bristol Chest Clinics and Hospitals are supervised by Bristol Welfare Officers, continued to work smoothly. Thirty-three patients were seen by the Social Workers. Only eleven of the patients referred were suffering from tuberculosis.

REPORT OF F. J. D. KNIGHTS, ESQ., M.D., F.R.C.P.
SENIOR CHEST PHYSICIAN, NORTH GLOUCESTERSHIRE CLINICAL AREA

In 1971 forty-four new cases were notified in the North Gloucestershire Clinical Area. They are analysed as follows :—

Abdominal Orthopaedic and Cervical glands	Primary or post primary infection	Minimal phthisis	Moderate phthisis	Advanced phthisis	Total
5	—	11	26	2	44

Twenty of the cases were referred by their general practitioners, 19 were referred from other hospital departments, 3 from other sources and 2 were contacts.

There was one immigrant from France and two from India.

CONTACT EXAMINATIONS

Arising out of these notifications, 196 adult contacts were called for examination and 140 attended.

Of 95 children called, 70 attended. Of these 45 were vaccinated with B.C.G. and 24 were tuberculin positive, of whom 8 were clinically well and 2 were admitted for further investigation.

REPORT OF R. A. CRAIG, ESQ., B.Sc., M.D., F.R.C.P.
CONSULTANT CHEST PHYSICIAN, BRISTOL CLINICAL AREA

The accompanying table shows the sex and age distribution of new cases of pulmonary tuberculosis, subdivided into sputum negative and positive cases, occurring in South Gloucestershire residents and notified by Bristol Chest Clinic in 1971. The total of 12 cases is an increase on the figure for 1970, which was 6. However, in 4 of the 12 cases evidence of tuberculosis had been noted on attendance at Bristol Chest Clinic 5 to 21 years previously.

One new case of non-respiratory tuberculosis was notified in 1971, involving the endometrium.

Two cases of pulmonary tuberculosis, both non-infectious and diagnosed elsewhere, came to the area and continued their treatment here.

NEW CASES OF PULMONARY TUBERCULOSIS IN 1971

Age Group in years	Sputum Negative Cases			Sputum Positive Cases			All Cases		
	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes
0 - 14	0	1	1	0	0	0	0	1	1
15 - 44	0	1	1	2	0	2	2	1	3
45 - 64	2	1	3	1	1	2	3	2	5
65+	0	0	0	1	2	3	1	2	3
All Ages	2	3	5	4	3	7	6	6	12

3. Venereal Disease

REPORT BY A. E. TINKLER, M.A., M.D., D.P.H.

Consultant Venereologist, South Western Regional Hospital Board

In 1971 there was a slight decrease in the total numbers of county residents seen at the venereal disease clinics held at Gloucester, Cheltenham and Bristol.

TABLE 1 New Cases : all conditions—Gloucestershire County Residents

Year	New Cases
1968	567
1969	715
1970	969
1971	876

SYPHILIS

This serious disease remains rare in the county, only one case was seen during the year in the early infectious stages of the disease and five in the late or tertiary stage. No cases of congenital syphilis were seen in county residents during 1971.

GONORRHOEA

There was a very considerable increase (44%) in the number of county residents who were treated for gonorrhoea in the clinics held at Gloucester, Cheltenham, and Bristol in 1971.

TABLE 2 Incidence of Gonorrhoea

Year	Gloucestershire
1967	110
1969	155
1971	275

The increasing proportion of young people infected under the age of 20 years, and the disproportionate increase in female cases are disturbing features of the rising incidence both nationally and in Gloucestershire residents.

SECTION D

SANITARY CIRCUMSTANCES OF THE COUNTY

1. Water Supplies and Sewerage

Fourteen schemes of sewerage and sewage disposal, and seven water supply schemes were considered by the County Council during the year. The estimated cost of these schemes totalled £1,498,279 for sewerage schemes and £70,680 for water schemes.

In the financial year 1970/71 the County Council's contributions under the County scheme for financial assistance to district councils totalled £183,034, £47,587 for water supply schemes and £135,447 for schemes of sewerage and sewage disposal.

Details of schemes considered by the County Council are set out below (estimated costs in brackets).

(A) SEWERAGE AND SEWAGE DISPOSAL

CHELTENHAM RURAL DISTRICT

(i) *Ashchurch Sewerage* (£129,000)

To divert part of the area served by the existing Ashchurch sewage disposal works to the extended Tewkesbury works, relieving a substantial overload on the Ashchurch works and permitting substantial new development in the area. 64 existing properties would have a first time service. The scheme was approved subject to minor amendments.

(ii) *Bishops Cleeve—Station Road Sewerage* (£60,000)

To relieve an overloaded part of the sewerage system and to improve the arrangements for the disposal of storm water. Strongly supported on public health grounds, the scheme was approved subject to recommendations that some sections should be re-routed to facilitate future planning of the area, and for highway purpose.

(iii) *Stoke Orchard Sewerage and Sewage Disposal* (£150,000)

A resubmission of a scheme previously approved in 1969, now somewhat extended to serve additional properties including a hospital and a school. The scheme, justified on public health grounds, was approved.

DURSLEY RURAL DISTRICT

Dursley Sewage Disposal Works (£78,400)

To provide mechanical sludge dewatering plant at the disposal works (£77,000) and to improve storm water separation arrangements (£1,400). The scheme was approved subject to a recommendation that an alternative method of sludge pretreatment be adopted.

GLOUCESTER RURAL DISTRICT

(i) *Longford Sewerage Scheme* (£75,000)

A comprehensive scheme for the re sewerage of Longford, approved by the County Council in 1964, was not carried out because of the transfer of part of the area to the City of Gloucester. This is a revised scheme to serve some 301 properties remaining in the Rural District area. The scheme was approved subject to minor comments.

(ii) *Nupend Surface Water Drain, Eastington* (£4,300)

To relieve recurring flooding of the central area of the hamlet of Nupend. The Rural District Council were informed that whilst there were no objections to the proposals, the scheme was not eligible for grant under the County scheme.

LYDNEY RURAL DISTRICT

Lydney Joint Sewerage Scheme (£733,000)

To improve the Lydney sewerage system and to provide a sewage disposal works to serve the town of Lydney and the adjoining areas of West Dean Rural District. The scheme was approved subject to re-routing part of a rising main because of the proposed Lydney By-pass.

NEWENT RURAL DISTRICT

Upleadon and District Sewerage Scheme—extension at Layne's Farm (£7,200)

A small scheme, to serve seven properties, submitted following an investigation of the main scheme by the Department of the Environment, was approved.

NORTH COTSWOLD RURAL DISTRICT

Bourton-on-the-Water Sewage Disposal Works extensions, and Wyck Rissington and Upper Slaughter sewerage scheme (£135,070)

A resubmission of a scheme approved in 1970, extended to include the village of Upper Slaughter at the request of the River Authority. The scheme was approved subject to comment on technical matters.

THORNBURY RURAL DISTRICT

(i) *Alveston Sewer Extension (£30,000)*

To relieve the existing overloaded sewerage system by the provision of a pumping station which will divert about one third of the flow into the Thornbury system where capacity is available. The alternative, to enlarge the Alveston sewers and extend the sewage disposal works, would have been far more expensive. The scheme was approved.

(ii) *Newport Sewerage Scheme (£40,000)*

An extension to the Stone and Woodford scheme to serve some 59 properties at Newport, was approved subject to comments.

(iii) *Stambourne Villas, Hamfallow—sewer extension (£1,859)*

To serve five properties. The scheme was strongly supported on public health grounds and was approved.

WARMLEY RURAL DISTRICT

(i) *Abbots Road and Castle Farm Sewerage (£26,591)*

To provide main drainage to 46 existing properties with provision for substantial future development. The scheme was approved.

(ii) *Upton Cheyney Sewerage Scheme (£27,859)*

As submitted this scheme was to serve 56 existing properties at an estimated cost of £25,859. At the request of the Department, the scheme was extended to serve a further six properties at an estimated cost of £2,000. The revised scheme was approved.

(B) WATER SUPPLIES

COTSWOLD WATER BOARD

(i) *Ampney Crucis, Waterton House (£4,160)*

To replace an existing private estate supply serving eleven properties. The owner of the existing supply had given notice of withdrawal of supply and an alternative source of water was urgently required. The scheme was approved.

(ii) *Pool Keynes, Oaksey Road mains extension (£2,400)*

To provide mains water to seven properties and a sailing centre. The scheme was approved subject to modification to meet the requirements of the County Surveyor.

(iii) *Withington, Western Area water supply scheme (£50,000)*

To replace an inadequate and bacteriologically unsatisfactory private estate supply, coupled with the provision of a trunk main to link three of the Board's sources. The scheme, which will provide mains water to 86 existing properties, was approved.

NORTH WEST GLOUCESTERSHIRE WATER BOARD

(i) *Haresfield, Beacon Road and Station Road mains extension (£4,772)*

To replace an inadequate private estate supply serving 29 existing properties, and to permit substantial anticipated future development. The scheme was approved.

(ii) *Toddington, Naunton Farm, mains extension (£2,448)*

To provide mains water to 12 properties (including two farms) at present served by a private estate supply which is unsatisfactory both in quality and quantity. The scheme was approved.

SODBURY RURAL DISTRICT

(i) *Hawkesbury Upton mains extension (£3,500)*

To provide mains water to four properties near Hawkesbury Common. Existing supplies from wells or springs were grossly polluted and the scheme was approved.

(ii) *Wick, Blue Lodge mains extension (£3,400)*

A joint scheme with Warmley Rural District to serve two properties whose existing supplies were polluted. The scheme was approved subject to a re-routing part of the main clear of the highway.

2. Gypsies

An existing caravan site near Gloucester has been purchased and is being modified to meet the requirements of the model standards for caravan sites. When completed it will provide for 73 pitches of which 43 will be for permanent residents, 24 for long stay gypsy families, and 6 for short stay families. The site is jointly financed by the Gloucester City Council and the County Council, and is managed by the Gloucester Rural District Council. On completion of this site there will be 52 pitches available for gypsy families in North Gloucestershire.

No further progress has been made on the provision of sites in South Gloucestershire.

3. MILK SUPPLY**(i) Licences**

During the year one of the holder plants ceased operating so that by the end of 1971 there were ten pasteurising plants treating some 27,900 gallons per day.

8 H.T.S.T. plants	....	....	27,740 gallons
2 Holder plants	....	....	160 gallons

The number of milk licences in operation at the end of the year totalled 613 as shown blow.

	1971	1970
(a) Producer/Retailers (licenced by the Ministry of Agriculture, Fisheries and Food, and including 4 producers who retail raw milk by consent)	67	68
(b) Producer/Retailers (included in (a) above) holding a licence from the County Council to bottle Untreated Milk from other Producers	3	5
(c) Dairies dealing in Untreated Milk other than in (a) or (b) ('B' licences)	5	3
* (d) Milk Dealers (Pasteurisers) ('C' licences)	11	12
(e) Dealers in Pre-packed milk ('F' licences) :—		
(i) Retailers	200	192
(ii) Shops	324	266
(iii) Vending Machines	3	3
	<hr/> 527	<hr/> 461
Total	<hr/> 613	<hr/> 549

*NOTE : Two pasteurisers licences have been issued in respect of one plant.

(ii) **Routine Sampling**

The number of routine samples taken during the year under the Milk (Special Designation) Regulations, 1963/65 totalled 4,051. Details of these are set out in the table below.

SUMMARY OF ROUTINE MILK SAMPLES

Origin of Samples	Designation	Total Samples taken	Phosphatase Test			Methylene Blue Test				Turbidity Test		Ultra Heat Treated Test		
			Pass	Fail	Not Done	Pass	Fail	Void	Not Done	Pass	Fail	Pass	Fail	Void
Dealers including Processors	Pasteurised	2,686	2,663	4	19	2,523	56	105	2	—	—	—	—	—
	Sterilised	30	—	—	—	—	—	—	—	30	Nil	—	—	—
	Ultra Heat Treated	57	—	—	—	—	—	—	—	—	—	55	1	1
	Untreated	845	—	—	—	755	58	32	—	—	—	—	—	—
Schools	Pasteurised	274	274	Nil	—	261	11	2	—	—	—	—	—	—
G.C.C. Properties	Pasteurised	97	96	Nil	1	94	1	2	—	—	—	—	—	—
Hospitals	Pasteurised	62	60	Nil	2	62	Nil	Nil	—	—	—	—	—	—
Totals		4,051	3,093	4	22	3,695	126	141	2	30	Nil	55	1	1

The samples not examined for the phosphatase test were taken during the postal strike when supplies of the reagent required were not available.

There was a further drop in the number of samples taken during the year, mainly due to a reduction in the number of untreated samples and of milk from schools. Of over three thousand samples of pasteurised milk, it is pleasing to record that only four failed the phosphatase test. Two of these were at a small dairy which uses the holder method and is much more dependant upon the human element.

The percentage of samples of pasteurised milk failing the Methylene Blue test (2.82%) shows a slight increase on 1970. Methylene Blue failures of untreated milk, were again disappointing at 6.98%, unchanged from 1970. All such failures from producer/retailers were reported to the County Dairy Husbandry Adviser of the Ministry of Agriculture, Fisheries and Food.

(iii) **Milk Containers**

Samples of washed bottles and churns were taken regularly from all pasteurising and bottling plants for examination by the Public Health Laboratory, as shown below :—

	Satisfactory	Fairly Satisfactory	Unsatisfactory	Total
Churns	84	15	25	124
Bottles	273	46	72	391

There was a slight reduction in the most satisfactory category of bottles and some improvement in churns, but the overall figure of 69.3% in the satisfactory range leaves considerable room for improvement.

There were few complaints received concerning milk bottles. One case, concerning a dirty 1/3rd pint bottle of school milk, involved an out-of-county dairy. Evidence was supplied to the Authority for the area where the dairy was situated. The dairy was fined £10. Proceedings were pending at the end of the year with regard to a complaint of a fly pupae in a bottle of milk.

Some schools in the County have milk supplied in Tetra-Pak cartons and there have been complaints of leaking cartons. It would seem that some problems arise no matter what form of milk container is used.

(iv) **Brucella abortus**

Number of herds from which samples have been taken :—

(i) Producer/Retailers and herds supplying milk to 'B' licence holders	....	....	79
(ii) Untreated Cream Producers (other than (i) above)	....	....	4
(iii) Producers using own milk in connection with farm holidays, bed and breakfast trade, or casual sales to caravanners and campers (other than (i) and (ii) above)	....		29
			<hr/>
Total	....	....	112
			<hr/>
Number of herds investigated further	....	....	19
Herds in which one or more infected cows were found	....	....	7*

*A number of bulk samples of milk were not inoculated into Guinea Pigs.

All routine statutory samples of untreated milk were examined by the Milk Ring Test, and periodic composite samples were taken from those herds where regular routine samples were consistently negative to the Milk Ring Test. Where routine or composite samples produced a reaction there was a follow-up investigation of the herd. Following moves to rationalise the sampling from farms for this purpose, joint discussions took place towards the end of the year with the Divisional Veterinary Inspector of the Ministry of Agriculture Fisheries and Food. Arising from this it was agreed that where an accredited Brucellosis free herd is regularly sampled by the County Council (e.g. in one of the categories in the list above), the Divisional Veterinary Officer should be notified immediately when any of the monthly composite samples gave rise to a reaction. The herd investigation which followed would then be undertaken by officers from the Ministry, but this Department would be kept fully informed of the findings of such investigation.

Further farms providing bed and breakfast accommodation or caravan sites, were located during the year. In some of these, samples showed that the herd was infected with *Brucella abortus*. With the increasing number of bulk tanks being installed at farms and the practice of drawing off requirements for the house, or the caravanners, from the bulk tank, the possibility of infected milk being consumed is increased. It is often impracticable for the farmer to keep completely separate milk from non-infected cows in such circumstances and the only safe way has been to insist that only heat-treated milk is sold or used in connection with the bed and breakfast business.

A total of 1,481 samples were submitted for examination for evidence of *Brucella abortus* ; details of these are set in the table below :—

UNTREATED SAMPLES EXAMINED FOR BRUCELLA ABORTUS

	Total Samples	Positive to Milk Ring Test	Doubtful (\pm) reaction to M.R.T.	Number found positive to <i>Brucella abortus</i> by direct culture or guinea pig inoculation
<i>Routine Statutory samples</i>	845	8	4	—
Composite herd samples	83	2	1	—
Producers (group iii)	198	5	3	1
<i>Follow-up samples</i>				
(i) Individual cows	340	40	5	10
(ii) Groups	10	2	Nil	none done
(iii) Composite	8	3	Nil	3*
	1,483	60	13	14

*Positive Milk Ring Tests from routine, bulk or group samples were followed up by individual cow samples. Because of this it was not usual for the original sample to be examined further. However, direct cultures were made in some cases and any found positive have been recorded. Doubtful (\pm) or weak positive (+) reaction to the Milk Ring Test were usually not examined further as it has been found to be more effective to take repeat samples.

CREAM

Details of the 103 samples examined by the Public Health Laboratory at Gloucester are set out below :—

SUMMARY OF CREAM SAMPLES

Type	No. of Samples	Methylene Blue Test Reduction time in			Void
		0 hours (Unsatisfactory)	More than 0 hours less than 4 hours (Doubtful)	More than 4 hours (Satisfactory)	
Untreated	18	8 (47%)	6 (33.3%)	—	4 (22.0%)
Heat Treated :—					
(1) Ex Producer	54	13 (24%)	13 (24%)	26 (48.1%)	2 (2.7%)
(2) Packed by Retailer	5	1 (20%)	1 (20%)	3 (60%)	—
(3) Pre-packed mainly from shops	24	8 (33.3%)	6 (25%)	10 (41.7%)	—
Ultra Heat Treated	2	—	—	2	—
	103	30 (29.4%)	26 (25.3%)	41 (40.0%)	6 (5.8%)

There has been an improvement since 1970 in the samples of heat treated cream, particularly those samples taken from retailers who had packed the cream into smaller retail containers on their own premises. There were fewer samples than the previous year but there has been a reduction in the quantity of bulk cream so handled and a corresponding increase in the sale of pre-packed cream.

The untreated cream samples show disappointing results. There were considerably fewer sample taken, but where one or two producers' results are consistently poor, the overall picture is generally unsatisfactory. The County Dairy Husbandry Adviser was informed of the unsatisfactory results.

Of the routine statutory samples, eight gave positive reactions and four were doubtful. In three of the producer/retailer herds a single infected cow was isolated ; one was immediately sold for slaughter and in the other two herds, following formal notice, arrangements were made for the milk from the infected cow to be heat treated. In one herd where six infected cows were found an Order was made under Regulation 20 of the Milk and Dairies (General) Regulations requiring all milk from the herd to be subjected to heat treatment.

There was a higher proportion of reaction among the samples taken from producers in group (iii). Two composite samples, one from a bed and breakfast farm and one from a camp site farm, were found infected and the sale of such milk was stopped in each instance.

During the year six producers were persuaded to cease to use their own untreated milk in connection with paying guests or casual sales to campers.

(v) **Tuberculosis**

Forty-seven samples were examined for the presence of tubercle bacilli. All were reported negative.

(vi) **Milk in Schools**

With the restriction on the free supply of 1/3rd pints of school milk to the under-seven year olds during the year, the quantity of milk supplied has decreased considerably. This caused great difficulties in finding dealers prepared to deliver very small amounts of milk to some of the isolated village schools. In some cases there was no way of ensuring delivery by mid-morning and milk had to be held in refrigeration at the school overnight. All milk supplied to County schools continues to be pasteurised.

(vii) **Summary of Milk Samples**

Statutory dealer samples	....	....	....	3,618
Routine Samples from Schools and Institutions				433
Brucella examinations	....	....	....	1,483
Tuberculosis examinations	....	....	....	47
Bottle and Churn examinations	....	....	....	515
Cream Samples	....	....	....	103
				<hr/>
Total	....			6,199
				<hr/>

4.(i) **REPORT ON THE WORK CARRIED OUT BY ANIMAL HEALTH DIVISION, MINISTRY OF AGRICULTURE, FISHERIES AND FOOD, GLOUCESTER, DURING 1971,**
by W. SIMPSON, ESQ., B.Sc., M.R.C.V.S., Divisional Veterinary Officer.

LIVESTOCK CENSUS 4TH JUNE, 1971

Cattle	....	....	....	....	227,627
Sheep	....	....	....	....	257,023
Pigs	....	....	....	....	125,818
Poultry	....	....	....	....	1,974,327

NOTIFIABLE DISEASES

Disease	1970		1971	
	Negative Reports Investigated	No. of Confirmed Cases	Negative Reports Investigated	No. of Confirmed Cases
Anthrax	191	7	168	3
Foot and Mouth Disease	1	—	—	—
Fowl Pest	15	68	30	122
Rabies	2	—	5	—
Swine Fever	2	—	2	—
Tuberculosis	—	—	—	—

ANTHRAX

The three positive cases were sporadic with no obvious origins.

DISEASE OF ANIMALS (WASTE FOODS) ORDER, 1957

Frequent inspections of the 81 licensed premises were carried out by the Technical Staff especially in the early half of the year when the Fowl Pest epidemic was at its height.

TUBERCULOSIS

The incidence of tuberculosis in cattle remained high. One herd was completely slaughtered out. During the year a possible connection between bovine tuberculosis and wildlife was discovered and is being pursued. It is hoped that this might give a lead to the high incidence of the disease in a small part of the county.

BRUCELLA ABORTUS INFECTION IN DAIRY HERDS

The Brucellosis Incentives Scheme introduced last year continues to attract entrants. At the end of the year, 410 dairy herds out of a total of approximately 1,500 had joined, with 191 herds fully accredited. There appears to have been some reduction in the number of new breakdowns in herds, but the percentage of infected herds as monitored by the Milk Marketing Board's Milk Ring Test shows the county as having above the national average incidence.

POULTRY HEALTH SCHEME

No reactors to the Salmonella Pullorum (BDW) tests were found. Testing was again curtailed because of the Fowl Pest situation.

SALMONELLOSIS

The level of general infection appears to have been the same as last year.

THE SLAUGHTERHOUSE (HYGIENE) REGULATIONS, 1958**THE SLAUGHTER OF ANIMALS (PREVENTION OF CRUELTY) REGULATIONS, 1958**

Inspections of slaughterhouses and knackeries were carried out in conjunction with the local Public Health Inspectors, but not as regularly as in previous years due to staff shortage. There is a continuing improvement in the general hygiene. The Department provided meat inspectors on occasions to help out at a local bacon factory.

MARKETS (PROTECTION OF ANIMALS) ORDER, 1964**MARKETS (PROTECTION OF ANIMALS) (AMENDMENT) ORDER, 1965****MARKETS (FAIRS AND LAIRS) ORDER, 1925**

Periodic inspections of markets was carried out by the staff on a more regular basis. Emphasis was placed on the Protection of Animal aspect of the inspections.

FOWL PEST

The epidemic which started in the autumn of 1970 continued into the first half of the year. There were 122 confirmed outbreaks. Incidence of the disease abated in the last half of the year, probably assisted by the use of a newly introduced live virus vaccine.

(ii) Diseases of Animals (Waste Foods) Order, 1957

During the year eight new licences were issued under the above order and seven licences were revoked so that the number of premises licenced at the year end was seventy-four. Proceedings were taken in one instance where poultry had been seen feeding upon raw offal at the premises of a licenced waste food boiler. The case was found proved and a fine of £5.00 imposed.

SECTION E**REPORT OF THE PRINCIPAL DENTAL OFFICER**

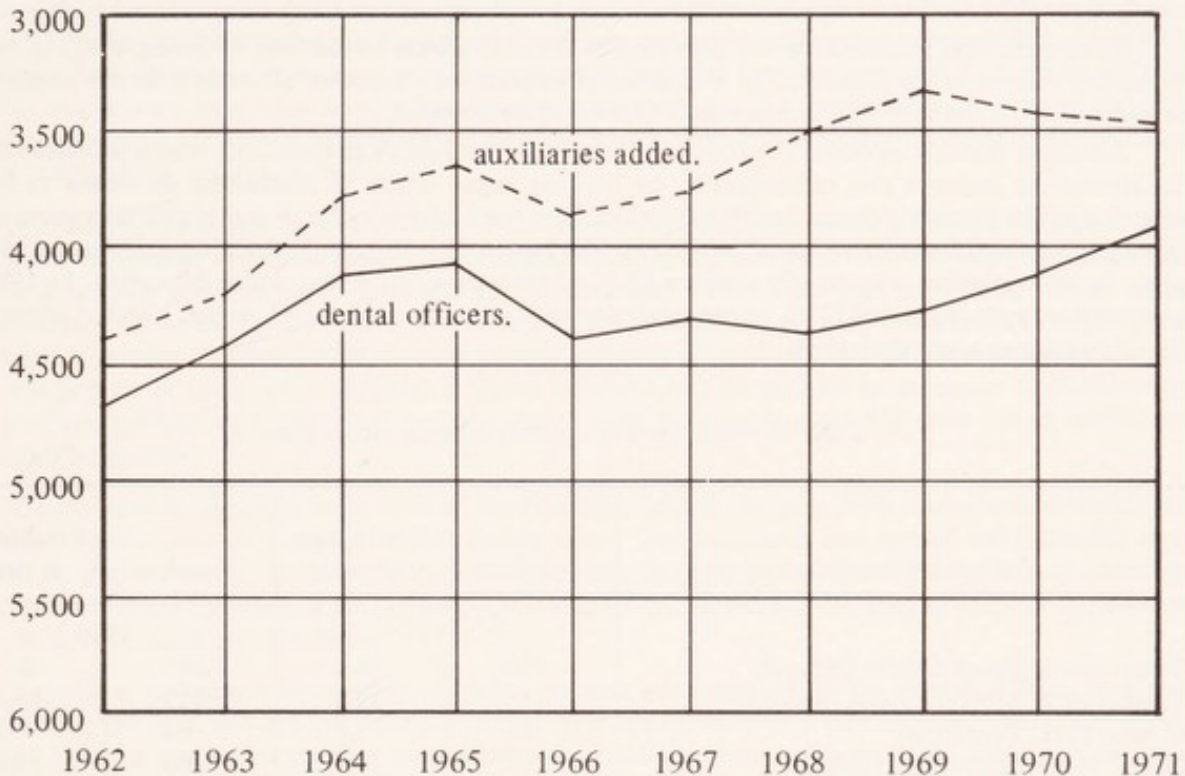
The change to a management outlook and control in Gloucestershire gives the opportunity to present the Annual Report of the dental services in a modified form. Management in the local authority dental service may be described as a means of making the best use of scarce resources of manpower and available money. The former (in terms of this Report) is the limiting factor in achievement of any objectives.

MANPOWER

There were a number of staff changes during 1971. At the end of 1970, Miss E. B. Nasmyth left to take up the post of chief dental officer at Hastings. From 1.1.71, Mr. J. P. B. Pengelly was appointed as my deputy, and the resulting area dental officer vacancy was filled by Mr. G. N. Willetts. In May occurred the tragic death of Mrs. S. L. Redfern, at the age of 25. Two other dental officers left during the year, one, Mr. D. M. Carpenter, to become deputy chief dental officer in Hampshire. On the credit side, four new whole-time dental officers were appointed, two changed from part to whole-time (but one other changed from whole to part-time) and an additional part-time orthodontist was appointed. Two part-time dental officers resigned, but one other returned to us. As a result, the year ended with 23 whole-time and 7 part-time dental officers (whole time equivalent 27.6) compared with 22 whole-time and 8 part-time (whole-time equivalent 26.9) on 31.12.70. Total sessions increased by 797 sessions actually worked.

On the auxiliary side the picture was less bright. Two of our most experienced left for family reasons, and one other transferred to Wiltshire. Two new auxiliaries started in September and another transferred from Devon in October. The net result showed a loss of 435 sessions, and thus reduced the gain in total dental sessions to 362. Manpower trends plotted against school population are shown in figure 1.

Fig. 1. Manpower—School Children per Dental Officer (Auxiliaries added)



PLANNING, PROGRAMMING, BUDGETING

Having assessed the available manpower, the objectives of the service need to be defined and plans made to meet the objectives with the resources available. The primary objectives of the dental service have been defined as, firstly, the prevention of dental disease and, secondly, the treatment of the conditions we have failed to prevent by early conservation. The latter has been described as secondary prevention. Loss of teeth from disease is normally regarded as an index of failure, though even that can be called tertiary prevention of the effects of bad teeth.

PRIMARY PREVENTION

The County Council having decided against fluoridation of water supplies, attention has been given to other means of increasing tooth resistance to caries by fluoride applications. During 1970 the three-year study of topical application by Mr. Willetts was completed. This study was designed to test not only the effectiveness of such application biennially on the smooth surfaces of certain teeth, but to test whether the time spent was economically justifiable. The full results have yet to be processed, but a preliminary summary indicates a highly significant reduction in smooth surface caries in permanent incisors and first molars of Primary School children. The time spent in achieving this reduction, however, appeared to be considerably in excess of the time required to treat the anticipated caries conservatively after its occurrence. But even though wholesale application appears to be unjustifiable in terms of time, clinical observation

suggests that selective application is highly effective. Early enamel lesions on smooth surfaces in caries-prone children have been seen to be arrested for several years, being presumably remineralised with a high proportion of fluoride crystals. Such surfaces may well show prolonged resistance to caries. It is hoped that full results will be available for the 1972 Report.

Fluoride mouth rinsing in schools has been practised for several years in Scandinavia, and on a smaller scale in Britain. The Education Committee approved a trial limited to two schools in the Tewkesbury area, for which Mr. Willetts and Mrs. Miles, the Dental Health Education Officer, will be responsible. Mr. Pengelly has devised a survey for assessing clinical results. It is hoped to bring the scheme into operation in early 1972.

Plans were also prepared for the provision of fluoride tablets to mothers of young children in two contrasted centres in the County. The continuity of interest (or otherwise) of mothers in this scheme will be judged by the number who return regularly for further supplies.

Adequate fluoride increases the resistance of teeth to the hostile environment which produces caries. An attempt to improve this environment, by limiting sugar intake to mealtimes, continues to be the objective of the County's dental health education. The team consists of a dental health education officer and a part of the time of those dental auxiliaries who have a keen interest in the preventive aspect of their work. In 1970 auxiliaries spent 630 sessions (25% of their time) on dental health education. In 1971 the sessions were reduced to 468 (22% of the total) due to the changes mentioned earlier. Table A shows how dental auxiliaries spent their time.

Table A—Allocation of Sessions (Dental Auxiliaries)

Type of Session	1971		1970	
	Number	Percentage of total	Number	Percentage of total
Treatment in Fixed Clinics (School)	790	38.4	1,067	42.8
Treatment in Mobile Clinics (School)	733	35.6	713	28.6
M. and C.H. Treatment	68	3.3	84	3.4
Dental Health Education (School)	243	11.8	286	11.4
Dental Health Education (M. and C.H.)	225	10.9	344	13.8
	2,059	100.0	2,494	100.0

Some compensation for shortage of dental auxiliary sessions was gained by using part of the time of two dental surgery assistants. They spent 63 sessions on dental health education. The total activity (or input) of this part of the dental service is dealt with by Mrs. Miles.

REPORT OF DENTAL HEALTH EDUCATION OFFICER

For many years dental health in this County has been carefully planned, programmed and budgeted. The objectives have specifically been examined and methods applied. Although methods can be first class, the test comes with their application, and the fact is that some dental health educators are better suited to a certain type of audience, and regrettably some are not suited to this type of work at all. It would be much easier to just "do dental health education", but a critical examination of this subject confirms that careful planning, based on available scientific evidence and applied to appropriate audiences at the minimum amount of cost, is the only sensible way of hoping for success. Coupled with this, we attempt to measure success or failure by studying the caries prevalence figures provided by dental officers. However, above all, like any health educator, one needs to be a confirmed optimist because one is continually confronted by pessimists who are only too ready to dub dental health education a failure.

Once again, talks to mothercraft sessions increased and the number of mothers attending these sessions also increased. At almost all the larger centres dental health is included as a main topic for one session, which is very gratifying. The more one talks to these groups the more apparent it becomes that this is basically where all dental health education must begin. To get the keen interest of a mother expecting her first baby could mean untold sympathy towards our cause. They may then influence their relatives and friends. My only fear is that manpower shortage could mean an interruption in the coverage of these sessions, which I am sure would be most detrimental. It was most pleasing to find that the total number of dental health talks had not decreased as much as expected. Unfortunately the regular visits to many child health clinics could not be maintained and most of the mobile child health clinics could not be visited. Although the number of schools visited was less, the total number of classes rose proportionately, so making little difference in the total talks given as compared with the previous year. Regretfully the talks given to play groups were considerably less, because we regard this as a vital activity. It is to be regretted that the number of secondary schools visited gets fewer each year, and this may be reflected in the future dental health of the adult community.

Mr. Smyth continued to give lectures to the student health visitors and St. Paul's College of Education. An exhibition was once again staged at this College and received with the same enthusiasm as before. It is most encouraging to have this appreciation and I hope next year we will be able to repeat this success. During 1971, Mr. Smyth was invited to speak to all the primary head teachers at their area meetings. It is very significant that the influence of primary schools on children's eating habits helps to form the pattern of their future caries experience. It would be a miraculous achievement to eliminate the eating of sweet things at break time : perhaps there would be more success if it were not so readily dismissed as impossible.

Dental Health Meetings were held at intervals throughout the year once again, and obviously are invaluable to the team as a means of exchanging ideas. The auxiliaries and myself were grateful to be allowed to attend some of the local British Dental Association and Bristol Paedodontic Society Meetings. There is little scope for meeting people connected with this work outside the County and any opportunity to do so is very much appreciated.

Pre-school invitations amounting to twelve sessions were sent out in the Forest of Dean area once again during the year, and my impression was that there appeared to be a very definite interest developing amongst these mothers. For the first time I felt some small progress had been made. However, any such progress in one year will not be reflected in caries prevalence figures for several years. The improved figures generally in the five year olds may be due to our first concentrated dental health efforts made on their mothers a few years ago. On the other hand the worsening of the fourteen year olds tends to confirm our suspicions of a few years ago that sweet snacking was becoming an ever increasing problem with primary school children.

I regret it was not possible to produce the other two leaflets for mothers as planned. Home made posters have also to be limited.

In conclusion, may I thank Mr. Smyth for his maintained support, together with all health visitors and dental and office staff for their continual help. At present we have a small keen team of enthusiasts who undertake dental health purely by choice. This is more apparent now than I can ever recall. Hopefully, I say long may it continue.

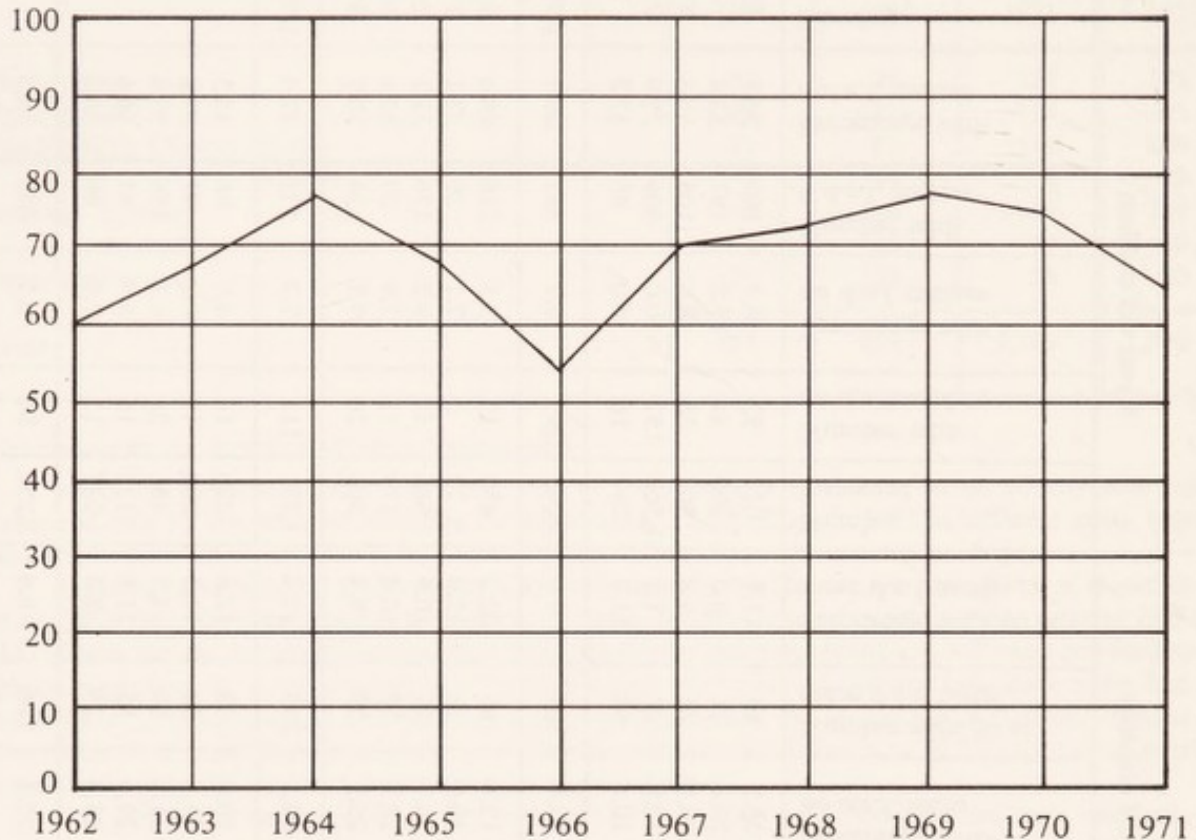
Table C—Caries Prevalence in Gloucestershire—1971

Type of Area	District	5 year old children						8 year old children				14 year old children		
		Number inspected	Number with no d.e.f. teeth	Percentage with no d.e.f. teeth	Number with 10 or more d.e.f. teeth	Percentage with 10 or more d.e.f. teeth	Number inspected	Number with no d.e.f. molars	Percentage with no d.e.f. molars	Number with 8 d.e.f. molars	Percentage with 8 d.e.f. molars	Number inspected	Number with 1 or more d.m.f. incisors	Percentage with 1 or more d.m.f. incisors
Urban	Cheltenham Borough	583	153	26.2	65	11.1	619	52	8.4	190	30.7	424	124	29.2
	Cheltenham Suburbs	388	111	28.6	31	8.0	290	44	15.2	97	33.4	—	—	—
	Gloucester Suburbs	254	65	25.6	25	9.8	303	26	8.6	108	35.6	377	142	37.7
	Bristol Suburbs	1,690	521	30.8	127	7.5	1,568	157	10.0	406	25.9	716	148	20.7
	Stroud and District	489	95	19.4	58	11.9	267	16	6.0	86	32.2	74	22	29.7
	Area Total	3,404	945	27.8	306	9.0	3,047	295	9.7	887	29.1	1,591	436	27.4
Small Towns (Pop. 1,500 to 10,000)	Forest of Dean	427	53	12.4	95	22.2	450	15	3.3	218	48.4	493	168	34.1
	North Severn Vale	139	29	20.9	18	12.9	70	5	7.1	26	37.1	179	35	19.5
	South Severn Vale	731	197	26.9	77	10.5	566	52	9.2	176	31.1	293	95	32.4
	North Cotswold	173	41	23.7	18	10.4	139	11	7.9	59	42.4	194	83	42.8
	South Cotswold	267	68	25.5	25	9.4	306	28	9.1	94	30.7	396	98	24.7
	Area Total	1,737	388	22.3	233	13.4	1,531	111	7.3	573	37.4	1,555	479	30.8
Villages	Forest of Dean	226	42	18.6	29	12.8	220	10	4.5	98	44.5	—	—	—
	North Severn Vale	270	68	25.2	30	11.1	232	19	8.2	91	39.2	—	—	—
	South Severn Vale	419	131	31.3	19	4.5	461	28	6.1	156	33.8	—	—	—
	North Cotswold	113	21	18.6	13	11.5	112	10	8.9	41	36.6	—	—	—
	South Cotswold	260	65	25.0	23	8.8	227	17	7.5	69	30.4	—	—	—
	Area Total	1,288	327	25.4	114	8.8	1,252	84	6.7	455	36.3	—	—	—
	Grand Total	6,429	1,660	25.8	653	10.2	5,830	490	8.4	1,915	32.9	3,146	915	29.1

ASCERTAINMENT OF NEED—INSPECTIONS

Reference to Fig. 1 shows that, although dental officer strength rose faster than the increase in school population (2.7%), total dental manpower fell. As a result of this and other factors, some of which are mentioned later, the number of individual children who were inspected fell from 72,834 in 1970 to 67,596 in 1971. Changes in relation to school population are shown in Fig. 2.

Fig. 2. Percentage of School Population Inspected.



The average of findings at routine school inspections is shown in table D. It will be noted that the upward trend in those not needing treatment at the time of inspection has been reversed, while the downward trend of those who need, but do not receive, regular treatment also continued. Marginally more were recorded as regular patients of general practitioner colleagues, but the increased demand fell largely on the school service. A rise of 1.8% work load does not look startling: it represents nearly 1,200 more children, which is a little over the average number treated by one dental officer in a year.

Table D—Findings at School Dental Inspections (per cent.)

		1971	1970	1969
Requiring Treatment	Not Requiring Treatment	32.2	33.0	31.7
	Receiving Treatment—School Dental Service	30.4	28.8	29.9
	Receiving Treatment—General Dental Service	17.0	16.9	15.2
	No Regular Treatment	20.4	21.3	23.2

Substantially more pre-school children were inspected, as shown in table E. Once again, the special efforts made by the staff at the three clinics in the Forest were rewarded by still more young children being seen—554 or 25% of the total inspected, in an area with less than 10% of the County population. Table E gives total inspection figures.

Table E—Numbers Inspected

	Inspected		Requiring treatment	
	1971	1970	1971	1970
Mothers	160	150	153	145
Pre-school	2,179	1,828	1,210	992
School—Routine (1st)	60,939	66,695	43,228	46,557
School—Special (1st)	6,657	6,139	5,405	4,970

TREATMENT—(SECONDARY PREVENTION)

The proportion of the time of dental officers spent on certain types of work is given in table F. Sessions in fixed clinics include 438 extra sessions, and the whole-time orthodontist worked 192 extra sessions.

Table F—Allocation of Sessions (Dental Officers)

Type of Session	Percentage of total		Percentage of total	
	Number		Number	
	1971		1970	
School Inspections	730	6.4	875	8.3
Treatment in Fixed Clinics (School)	5,763	50.7	5,519	52.2
Treatment in Mobile Clinics (School)	3,093	27.2	2,658	25.2
Orthodontics	1,182	10.4	1,088	10.3
M. and C.H.	567	5.0	403	3.8
Administration of General Anaesthetics	30	0.3	25	0.2
	11,365	100.0	10,568	100.0

Table G contains a summary of the official returns to the Ministries, and table H shows more clearly changes occurring in the pattern of treatment provided. For both mothers and pre-school children, the trend continues to be towards more teeth conserved and fewer removed. Over 20% more pre-school children received treatment than in the previous year, and, for the first time in several years, more mothers were treated.

The figures for school children present a number of problems. Although treatment sessions available rose by 4.4% and correspondingly more items of treatment were carried out, the number of children for whom this treatment was provided was virtually the same as in 1970. Particularly marked is the increase in the number of permanent teeth filled per child. This number rose to a ceiling of 2.01 per child in 1961,

the increase being due (it was supposed) to more caries following the end of sweet rationing and children having more pocket money, coupled with a backlog of work due to staff shortage. As caries levels stabilised and staff increased, permanent teeth filled fell to 1.68 per child in 1968. The average for 1963-68 was, in fact, remarkably stable at 1.75 teeth per child, and a pattern on which to base future assumptions and plans appeared to be established. But, as table H shows, the last two years have shown a rapid increase, comparable to the period 1957-61.

The importance of these figures is that the more work required for each child, the fewer the children who can be treated in the year, given the same staff level. In other words, more staff are needed to cover the needs of the same number of children. The reasons for this situation therefore require the most careful study. An increase in the average level of caries is one postulate. Of this there is some evidence, but certainly not (as far as the very limited evidence goes) commensurate with the increase in teeth filled. Another possibility is that more teeth are being filled on occlusal surfaces as a measure to prevent caries that is anticipated in later years. If in fact such surfaces will become carious in a few years time, this type of treatment is clearly worth while. Clinical observation, however, makes it apparent that a proportion of "sticky fissures" in newly erupted teeth do not become carious. Prophylactic filling of such surfaces therefore consumes time which could be better spent on conserving established lesions in other children. An analysis undertaken during the year showed a surprising range of clinical diagnosis between dental officers—from 2.96 to 1.24 permanent teeth filled per child. Differences in caries levels in the two areas concerned were certainly not as diverse as this range might suggest. The whole complex problem of the most economical use of scarce professional time, in the interest of the young community as a whole, will be the subject of study during 1972.

It might be expected that the increased conservation in permanent teeth would lead to a higher ratio of such teeth saved compared with those extracted for caries. Table H shows that this is not so: the ratio, which had steadily improved over the years, for the first time showed a downward trend. Are we spending too long on too few children, with the result that some children who also rely on our service have to wait so long for treatment their teeth become unsalvageable? This is another of the many factors for study.

Table G—Visits and items of treatment

	Mothers		Pre-School		School	
	1971	1970	1971	1970	1971	1970
Patients treated	152	140	1,172	972	24,329	24,315
Total visits	474	398	2,692	2,789	65,078	63,717
Courses commenced	170	147	1,331	1,100	27,275	26,860
Courses completed	137	112	1,146	905	24,904	23,867
Permanent teeth filled	371	276	—	—	39,860	37,934
Permanent teeth extracted for caries	115	133	—	—	1,890	1,639
Permanent teeth extracted for Ortho.	—	—	—	—	1,512	1,258
Temporary teeth filled	—	—	2,548	1,906	18,249	17,326
Temporary teeth otherwise conserved	—	—	110	110	1,657	1,391
Temporary teeth extracted	—	—	859	748	10,245	9,579
General anaesthetics	7	17	295	289	2,672	2,722
Prophylaxis	89	64	95	73	3,187	2,950
Dentures	21	24	—	4	96	89
Patients x-rayed	30	29	7	7	2,035	2,012

Table H—Treatment per 100 patients

	Mothers			Pre-School			School		
	1971	1970	Av. 1965 -69	1971	1970	Av. 1965 -69	1971	1970	Av. 1965 -69
Fillings (permanent teeth) ...	269	209	186	—	—	—	199	191	176
„ (temporary teeth) ...	—	—	—	253	231	207	83	79	68
Total Extractions ...	76	95	130	73	77	90	56	51	57
Ratio of teeth filled to teeth ex- tracted for caries (permanent)	3.2	2.0	—	—	—	—	21.9	23.1	20.8

ORTHODONTIC TREATMENT

The demand for this type of service continues to grow, the load increasing by 11% during 1971. Despite the appointment (part-time) of a third orthodontist, the waiting lists continue to lengthen. As table F shows, over 10% of total dentists' time is spent on this aspect of the service, and it is hard to see how more time can be justified. Table I shows the outline figures for the year. It should be noted that "cases" refer to individual children, not to "courses of treatment," and that cases where abnormalities could be corrected by extractions only are included.

Appliances only were used for 593 (33%) cases, appliances and extractions for 1,101 (62%) and extractions only for 80 (5%). Fixed appliances totalled 47, and removable 1,321. Of new cases started, 107 (16%) were undertaken by dental officers, and 114 of the total treated had been referred by general dental practitioners. Mr. Everard continued his attachment to the Gloucester cleft palate unit, and he and Mrs. Popplewell continued their bi-monthly sessions at Bristol Dental Hospital.

Table I—Orthodontic Treatment

	Number	Percentage of total under treatment	Percentage increase or decrease over 1970
Cases under treatment, 1971 ...	1,774	—	+ 11
New cases started in 1971 ...	692	39	+ 6
Cases completed in 1971 ...	531	30	+ 1
Cases discontinued in 1971 ...	58	3	—
Total completed or discontinued in 1971	589	33	+ 1
Cases c/f to 1972 ...	1,185	66	— 2

ANAESTHETICS

Medical anaesthetists attended 208 of the 238 normal "gas" sessions held. Prolonged general anaesthesia for conservation for certain handicapped children, started in Cheltenham Borough clinic in 1970, was also used in Gloucester clinic during 1971. The service now covers this type of need in north and central Gloucestershire, and the Forest. It is hoped to start a similar service for the south during 1972. A new technique known as "relative analgesia," which does not require the attendance of a specialist anaesthetist, was used in Cheltenham for especially nervous children. It was found to be particularly useful for children with sensitive teeth who were distressed by local anaesthesia.

Local anaesthetics were used for extraction of teeth as follows :—mothers 70%, pre-school children 7% and school children 49%.

OTHER WORK

Figures for children attending training schools are now included in normal school returns. A few from adult centres were treated when referred by mental health officers, but some had to be passed to Bristol Dental and other hospitals for specialised or in-patient treatment. By arrangement with the Governors, the dental needs of the Salesian residential school and the Kingswood Training and Classifying schools were again covered by the County service. Fifty-five boys at the former were inspected, and 134 at the latter, all treatment necessary being subsequently provided.

DENTAL LABORATORY

The result of the satisfactory grading structure and the excellent premises is that a very high morale is maintained by the staff. High morale is essential to cope with continual high pressure of work, coupled with the exacting demands of hospital consultants, orthodontists and dental officers, none of them satisfied with less than perfection. A vacancy in the earlier part of the year necessitated sending some work out to commercial laboratories. The vacancy was satisfactorily filled in May, since when the staff have coped with all demands. Total operations increased by 550 over 1970, all types of work showing an increase. An outline of operations is shown in table J.

Table J—Work of the Dental Laboratory

Ortho- donic Appliances	Dentures	Repairs and Relines	Crowns and Inlays	Study Models (pairs)	Splints and Special Appliances	Total No. of Operations
1,282	282	103	81	1,311	62	4,516

TRAINING

Apart from the Dental Health Diploma course, referred to earlier, several dental officers attended short courses in various subjects. Five auxiliaries attended their own annual conference and other appropriate meetings and lectures in order to maintain interest and increase knowledge. A course for dental surgery assistants was started at the Gloucester Technical College, and the course in Bristol continued as before. One dental surgery assistant passed the appropriate examinations during the year. The apprentice continued his training at the Matthew Boulton Technical College.

CONCLUSION

I believe this Report gives a picture of a service which is very much alive, is still growing and is aware of the many problems with which any community service will be faced. No service can stand still : we either go forward or go back. Our success in the coming year will depend to no small extent on finding the answers to the problems I have outlined, and on the continued co-operation of all dental staff. I believe the future, with all the reorganisation proposed in the coming years, will depend on the successful application of management principles to dental clinical work. It will not be easy : every profession tends to entrench itself in mystique. But mystique is not enough for 1974 : we cannot escape facts for ever.

Once again may I give my sincere thanks to all sections of the dental service, and to the many others without whose active help and interest our efforts would be very much less successful.

SECTION F

SCHOOL HEALTH SERVICE

(1) County

(i) SCHOOL MEDICAL EXAMINATIONS

Two full-time Departmental Medical Officers left during the year and one retired. It has not been possible to replace them with full-time staff, but we have been fortunate in recruiting five part-time Medical Officers. There is, however, at 31st December, one large area with inadequate medical coverage. With the coming of part-timers the area served by each Medical Officer has been altered in order to give to each part-timer a complete area with child health clinics and primary and secondary schools. This gives greater continuity, both to the doctor and to the parents of the children concerned, and makes the job more interesting to the doctor.

The system of pre-school medical examinations described in last year's Report has become well established. Children with some defect which is already under treatment by their general practitioner or the hospital, are not now brought up each year for examination. The saving in medical time from this and from the establishment of the pre-school examinations has enabled the Medical Officers to pay more frequent visits to the schools. It is desirable that the Medical Officers visit all their schools once per term, and the staffing position has enabled this policy to be carried out in most areas during the year. These visits are planned well in advance so that disturbance of school routine is reduced. The first visit in the term by the Medical Officer consists of a discussion with the school staff and the health visitor for the area who has a detailed knowledge of home backgrounds. Children who, on medical grounds, are causing anxiety to the teachers can be listed for examination. As a result of these discussions a decision is made on which children need to be seen by the doctor. In infants' schools, in addition, there are always a few who slip through the net of the pre-school examination, and these are added to the list. The parents are always invited to any examination of their child by the school doctor. In addition to the above, a medical questionnaire is sent to the parents of all children in their second year in infants' school and their second year at secondary school, and, depending on the answers given, children are selected for examination. Again the parents are always given an opportunity to be present.

After discussions with the headteachers, these new arrangements came into operation in the September term, and so far the reactions are very favourable. The school staff feel that there is now more time for discussion with the doctor, and the medical officers have a better appreciation of the problems in their areas and have more time for special examinations. These arrangements also enable the medical officers, in large measure, to plan their individual programmes, and give them an opportunity to make extra visits to schools where necessary.

(ii) THE COMPUTER

From 1st January 1967, all births were recorded on the computer, together with the results of subsequent medical examinations. From the end of July 1971, all those children who had computer medical records began to come forward for their pre-school medical examination. It was therefore necessary to devise a computerised school medical record card (known as form CIOM). The card was redesigned by Mr. F. H. Livesey, the Deputy Administrative Officer, in his capacity as Computer Liaison Officer, and this redesign has been accepted by the Department of Education and Science. Many hours of devoted work by Mr. Livesey were spent on this redesign and on instructing the staff in the use of the new form. The principal difference from the old 10 M form is that the information from the medical examination is now recorded by bar-marking one or more multiple choice boxes and this information can then be read into the computer by an optical mark reader.

(iii) IMMUNISATION IN SCHOOLS

The diphtheria, tetanus and polio boosters which were previously given on school entry, are now given at the pre-school medical examination. B.C.G. is still offered during the first year at secondary school, and booster tetanus and polio injections are offered during the last year of school. The scheme

which began last year of offering rubella (German measles) vaccine to all girls aged 11-13 has continued to be well received, with high acceptance rates. The scheme first began with 13 year old girls and the age is gradually being reduced so that the vaccine can be offered in the first year at secondary school.

Tables 1, 2, 3 and 4 on page 24 give the statistics.

(iv) VISION TESTING

All children have their vision tested every year. The vital importance of annual vision testing from 11 years onwards is everywhere accepted, but it is a formidable task. Disruption of school routine would be greatly reduced if all secondary schools had their own school matrons who could gradually work through the vision testing programme in consultation with the teaching staff.

(v) EYE CLINICS

Specialists attend at 18 hospital and local authority clinics throughout the County. The eye specialists are employed by the Regional Hospital Board, and in order to reduce waiting lists the Board has agreed to convene a meeting of eye specialists in the Health Department early in 1972.

(vi) AUDIOLOGY

A second full-time audiology technician started in September. This has enabled the County to be divided in half, with a subsequent reduction of travelling time, and enabling a start to be made on the routine testing of 11 year old children in addition to the 6 year olds.

We have also been able to establish clinics during the holidays to see children referred by general practitioners, departmental medical officers, health visitors and specialists.

(vii) EDUCATION FOR THE DEAF

We are indebted to the Senior Teacher of the Deaf and her staff for the continuing wonderful work they do with, and for, our deaf and partially hearing children and for their help in assessing hearing in those children who are difficult to test, such as the very young.

There are two partially hearing units in the County and a third one in Gloucester City which we are able to use.

The partially deaf unit at Quedgeley Primary School opened in September, 1962, with 10 children in ages ranging between 5-9 with wide degrees of hearing loss, including severely deaf children. The children are brought from Tewkesbury, the Forest of Dean, Gloucester, Cheltenham and Slimbridge to the unit. As the demand for places grew and children were admitted soon after the age of 4½, it was decided to make separate provision for infants.

An infant unit and a secondary unit for the partially hearing were established at Longlevens Primary and Secondary Schools in 1966. The change in title of these units represents the more positive approach to children with defective hearing that has been gathering momentum since the introduction of powerful individual and group hearing aids allied to early ascertainment and good parent guidance. A junior unit was attached to this school in 1969 thus completing the help to children to integrate with their hearing friends throughout their schooling. Boundary changes in 1967 brought the Longlevens schools into the City of Gloucester, but since our Teachers of the Deaf are jointly employed by Gloucester, these units remain under the same direction and a happy relationship between the two local authorities ensures that needy children get help.

In 1968 an infant unit was established at Rodford Primary School in Yate New Town in the south of the County, and in 1971 a junior class started. It is hoped to establish a secondary class in the near future and discussions are taking place with what will be the new County of Avon.

The organisation of all these units is kept constantly under review. Advancements in amplifying equipment help children to benefit more from the time they spend in the classrooms among normal children. The demand for unit places is not easily forecast—at times there have not appeared to be any young children coming along, and then, for example, an epidemic of maternal rubella can result in increased numbers.

The social benefits of the partially hearing child spending his formative years among normally hearing children with specialised help from Teachers of the Deaf are well recognised as invaluable but some children are still in need of residential schools when home circumstances or additional handicaps are involved.

It is impossible to consider the units in isolation from the educational service for the deaf and partially hearing as a whole. The peripatetic teachers can observe a child's progress at home and in the ordinary school, and can draw on their experiences with similar children to decide whether or not a particular child is likely to be able to benefit from the normal school, with help from the visiting teacher, or will need to spend more time in a special class. Many children who might have been thought to need unit placement because of the severity of their hearing loss have, in fact, made very good progress because of personality, intelligence and home background. This also applies to children for whom distance from a unit precludes daily travelling. Their success in the normal school has been due to the frequent and concentrated help from a visiting Teacher of the Deaf—and their parents. We are very fortunate indeed in having the services of such a dedicated team of Teachers of the Deaf.

(viii) SPEECH THERAPY

During most of the year we have been well below establishment but by the end of the year with the appointment of a full-time senior speech therapist and a number of part-timers, we were almost at full strength. The service is, however, still very thinly spread and the amount of time spent in the special schools is less than desired.

The junior speech unit attached to Charborough Road Primary School, Filton, is now well-established and doing excellent work. Children have attended the unit this year aged 6-11 years of age and where possible they integrate with the children in the school proper. We look forward to starting the nursery group at the unit early next year when it is hoped to have eight children aged 4-7 years in attendance.

As new health centres are built, a 'quiet room' is planned in each one for the use of speech therapists, audiology technicians, teachers of the deaf and psychologists. The rooms will have polystyrene tiles, a carpet and curtains, and the rooms already built in the Quayside Clinic and Yate Health Centre are much appreciated by the staff.

During the year a review was made of all known cases of fifth and sixth form stammerers, and places have been reserved for two children on special intensive courses.

(ix) PHYSIOTHERAPY

We have now only one full-time orthopaedic after-care sister and one part-time one, and at the start of the year only very few physiotherapists. However, as the year has progressed we have managed to recruit a number of part-time physiotherapists and by the end of the year we have a much more satisfactory team.

The increasing number of spina bifida and spastic babies who are surviving is increasing the case loads of physiotherapists, and it seems impossible to cope with the demands. Group therapy is being used where suitable.

Work has followed the usual pattern, that is :—

1. The treatment and after-care of orthopaedic cases upon discharge from hospital.
2. The treatment of congenital deformities, e.g. club-foot, congenital dislocation of the hip joint.
3. Advice and treatment of pre-school and school children with orthopaedic and neurological problems, following referral by general practitioners and departmental medical officers.
4. The follow-up treatment of children seen by the orthopaedic surgeons in the clinics held throughout the County.

(x) SCHOOL PSYCHOLOGICAL SERVICE

The year has shown continued co-operation between school health and the school psychological service. Weekly conferences are held where each child who has been put forward for psychological assessment is fully discussed by both services and a decision made as to whether one or the other service should

see the child. Whenever there is a medical factor involved, the child is seen by a departmental medical officer. Where there appears to be no obvious medical factor involved a school psychologist sees the child and if special education is recommended a social report is also made for the information and assistance of the special school.

(xi) CHILD GUIDANCE

Children are referred to child guidance clinics through various sources, and the attendance of the school psychologists is an excellent link between the clinic, school and home. Two of our doctors attend sessions regularly, one in the north of the County and one in the south.

One of the activities of the child guidance clinic, the holiday project, started in 1969, is proving of great benefit to the children. During the year two groups of about fourteen children aged between 5 and 14 years were accommodated in each of two beautiful country houses owned by the County Council. Social work students, social service officers and teenage helpers ran the holidays under the enthusiastic direction of Miss E. Karn, psychiatric social worker. There was a gradual training of control and self-discipline and a growth of confidence, and the holidays were enormously enjoyed by the children.

(xii) SCHOOLS FOR MALADJUSTED

There is one residential school for maladjusted boys in the County (Cam House) and one day school for maladjusted children, and places are made available to us in another day school administered by Cheltenham.

At the end of the year there were 11 Gloucestershire boys in Cam House School and 54 children attending both day schools for maladjusted. 84 children are at residential schools outside the area and 21 children are waiting for places.

Cam House School takes 45 boys from 11 years of age. The problems of the boys admitted cover a very wide range of types of maladjustment, including school phobia, enuresis, encopresis, violent aggression, gross academic underfunctioning and delinquency. There is a great need for more social workers to be available for regular visiting of these schools and for liaison with parents—someone who would be common to both the school and the home.

(xiii) SPECIAL SCHOOLS FOR EDUCATIONALLY AND MENTALLY HANDICAPPED CHILDREN

There are three day/boarding schools for E.S.N. children, one of which is for children aged 7-11 years and the others for children from 11 years onwards. There are also three day schools, and in addition places are made available in two day schools in Cheltenham.

There are five day schools for the severely mentally handicapped and we are able to use one school in Cheltenham. There are, in general, extensive waiting lists for these schools, and more and more the teachers in normal infant and junior schools are hard pressed because of retaining these children in their schools. An infant unit in the primary special day/boarding school (Amberley Ridge) is badly needed.

The type of child now in these special schools seems to have changed over the past few years and there are more maladjusted mentally handicapped children attending. This gives rise to added responsibility and one can only admire the teachers in these schools for their patience, enthusiasm and dedication.

There are four diagnostic units.

(xiv) PHYSICALLY HANDICAPPED CHILDREN

We have no school of our own for physically handicapped children but are able to use a special day school in Gloucester City for those children who live near enough to travel daily. We are fortunate in having a private day/boarding school—St. Rose's School for Physically Handicapped Children, in Stroud, and we take up a large proportion of the places there.

One hundred and seventy-seven physically handicapped children are being educated in special schools both in Gloucestershire and outside the area, of whom 40 are blind or partially sighted, 16 are deaf or partially hearing, and 2 are epileptic. Twenty-six handicapped children attend day special schools in Bristol.

With the improved techniques for helping children with spina bifida, more and more such children are reaching school age in a condition where they can attend a normal school if they have a little extra help for toilet purposes, etc. It is our policy to keep a handicapped child at a normal school whenever possible, and we are grateful to the Education Department for readily providing welfare assistants who help handicapped children to feel as normal as possible and to remain in an ordinary school.

A new spina bifida unit opened in the Bristol area towards the end of the year and one of our medical officers with a particular interest in the condition attends the clinic each week. This has proved invaluable as we now have a direct link with the specialist team who in turn are helped by our medical officer's intimate knowledge of the home background and the school conditions, and in the light of this more precise information better assessment of the child's needs can be made.

(xv) HEAD LICE

This was a problem during the year, as in many other parts of England. One large infants' school in particular suffered severely. We have now changed to the routine use of a new preparation (Malathion) throughout the County and by the end of the year there were very few cases.

(xvi) CHIROPODY

There is undoubtedly a need for a school chiropody service because there are many foot deformities in children which could be prevented from developing into crippling conditions in later life, and there are many relatively minor ailments, such as plantar warts, which could be treated if a good chiropody service were available. It is hoped to make a start next year in forming such a service.

(xvii) SCHOOL BUILDINGS

The conditions for medical examinations in far too many schools in the County still leave much to be desired. It is necessary to take a caravan to many schools in order to have a quiet place in which to examine the children and talk to parents. During the year the caravan in use became unroadworthy but we were fortunate in obtaining a new 9 ft. caravan. This little van has already done stalwart service.

(xviii) SCHOOL MILK

Since September when free milk was discontinued after infants' school level, there have been only 41 requests for free milk and all these requests have been for medical reasons. In fact, the problem in the County is far more one of obesity and slimming clubs have been started in some schools during the year.

(xix) HEALTH EDUCATION

Health education is carried out in schools by health visitors, health education staff and doctors on a variety of subjects. Discussions on the dangers of smoking, for example, begin during the first year at secondary school. We are fortunate in this area in that there appears to be no extensive drug problem. Teams of advisers, however, have been established in the County and in-service training has taken place for teachers, health visitors, social workers and others. Films are shown in schools and talks are given; the Police have been particularly helpful in this respect.

(xx) ENURESIS CLINIC

The treatment provided by this clinic has been extraordinarily successful during its first full year of operation. As its success has become more widely known among general practitioners, the number of referred cases has increased and there is now a growing waiting list.

(xxi) DENTAL SERVICE

The report of the School Dental Officer is shown on page 42.

(xxii) SWIMMING POOLS AT SCHOOLS AND OTHER COUNTY PREMISES

Six new swimming pools were completed during the year bringing the number of pools at County premises at the year end up to fifty. Five privately owned pools are now available for use by primary schools and these were regularly inspected. Work was in progress on a further seven pools and enquiries for new pools are increasing. Most of the pools now being installed are provided with means of heating the water to extend the useful swimming season, and many of the schools with unheated pools are now considering the addition of heating plant.

With the provision of a purification plant at Walton House Nursery pool, only four pools now operate on the unsatisfactory "fill-and-empty" system.

The following table shows how swimming pools at schools and other County premises have developed from a single, open-air, unheated pool operating on the "fill-and-empty" principle in 1954, to fifty pools at the end of 1971, of which forty-six are provided with purification plants, twenty-four are heated, and four are covered. Whereas all seventeen pools in 1964 were of traditional reinforced concrete construction, most of those installed in recent years have been of the prefabricated type with a water retaining liner. With these increasing numbers it is becoming difficult to ensure adequate supervision during the peak swimming period from April to October. The appointment of a swimming pool fitter and an increase in the maintenance allowance cannot be long delayed.

Swimming Pools at Schools and other County Premises				
	No. of Pools	Pools with filtration plants	Heated pools	Covered pools
1954	1	—	—	—
1958	7	1	—	—
1962	15	6	—	—
1966	27 (3)	23	1	1
1970	44 (16)	39	18	4
1971	50 (21)	46	24	4

Under construction at end of 1971—7 (2)

Figures in brackets are prefabricated liner pools.

(xxiii) FOOD HYGIENE

Two hundred and fifty-three visits of inspection were made to kitchens at schools and other County premises during the year.

(xxiv) NUMBER OF SCHOOLS AND CHILDREN IN ATTENDANCE

COUNTY (excluding Cheltenham), January, 1972.

	No. of Schools	No. on Registers
1. Nursery	1	38
2. Primary	327	54,648
3. Secondary	51	32,095
4. Special	17	1,196
Total	396	87,977

CHELTENHAM EXCEPTED DISTRICT

	No. of Schools	No. on Registers
1. Primary	27	7,627
2. Secondary	11	5,439
3. Special	4	366
Total	42	13,432
GLOUCESTERSHIRE TOTAL	439	101,409

STATISTICAL TABLES

Children Requiring Education at Special Schools

	Newly Assessed	Placed in Year	At end of year			
			Requiring Places		Attending	
			Day	Boarding	Day	Boarding
1. Blind	1	1	—	—	—	15
2. Partially Sighted	8	7	—	1	6	19
3. Deaf	—	—	—	—	6	4
4. Partially Hearing	2	1	1	—	—	6
5. Physically Handicapped	23	21	6	—	61	32
6. Delicate	9	2	—	—	4	21
7. Maladjusted	61	57	4	17	85	95
8. E.S.N.	174*	226	186	31	1,222	189
9. Epileptic	1	1	—	—	—	2
10. Speech Defects	—	—	—	1	—	1
Total	279	316	197	50	1,384	384

*Of the 174 children, 76 were assessed by medical officers and 98 were assessed by educational psychologists.

MEDICAL INSPECTION AND TREATMENT

PART 1.—MEDICAL INSPECTION OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS (INCLUDING NURSERY AND SPECIAL SCHOOLS)

Table A—Periodic Medical Inspections

Age Groups inspected (By year of Birth)	No. of pupils who have received a full medical examina- tion	Physical Condition of Pupils Inspected		No. of Pupils found not to warrant a medical examinat'n	Pupils found to require treatm't (excluding dental diseases and infestation with vermin)		
		Satis- factory	Unsatis- factory		for defective vision (excluding squint)	for any other condition recorded at Part 2	Total individual pupils
		No.	No.				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1967 and later	2,794	2,792	2	—	25	147	172
1966	6,374	6,365	9	—	96	214	265
1965	2,567	2,566	1	—	76	239	307
1964	568	568	—	—	10	56	61
1963	1,192	1,192	—	—	92	85	156
1962	84	84	—	—	11	3	13
1961	51	51	—	—	4	1	5
1960	26	26	—	—	3	1	3
1959	192	192	—	79	19	7	25
1958	1,478	1,478	—	1,068	53	28	70
1957	1,130	1,129	1	677	103	38	132
1956 and earlier	337	336	1	110	80	13	89
Total	16,793	16,779	14	1,934	572	832	1,298

Column (3) total as a percentage of Column (2) total 99.91%

Column (4) total as a percentage of Column (2) total 00.09%

Table B—Other Inspections

Number of special Inspections	....	....	....	47,802
Number of Re-inspections	....	....	....	13,541
Total	....	....	....	61,343

Table C—Infestation with Vermin

(a)	Total number of individual examinations of pupils in schools by school nurses or other authorised persons....	89,489
(b)	Total number of individual pupils found to be infested	939
(c)	Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	316
(d)	Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	—

PART 2.—DEFECTS FOUND BY PERIODIC AND SPECIAL MEDICAL INSPECTIONS DURING THE YEAR

NOTE.—All defects, including defects of pupils at Nursery and Special Schools, noted at period and special medical inspections are included in this Table, whether or not they were under treatment or observation at the time of the inspection. The number of pupils found to require treatment (T) and the number of pupils found to require observation (O) are included separately.

Defect Code No. (1)	Defect or Disease (2)						Periodic Inspections				Special Inspection
							Entrants	Leavers	Others	Total	
4	Skin	...	...	...	...	T	34	11	9	54	2
						O	213	15	83	311	5
5	Eyes	(a) Vision	...	...	...	T	209	165	199	573	1,456
						O	409	42	359	810	1,916
		(b) Squint	...	...	...	T	150	7	29	186	6
						O	230	—	17	247	5
		(c) Other	...	...	...	T	14	5	6	25	—
						O	42	25	25	92	1
6	Ears	(a) Hearing	...	...	...	T	67	8	8	83	5
						O	739	7	178	924	47
		(b) Otitis Media	...	...	...	T	13	1	—	14	—
						O	222	6	29	257	6
		(c) Other	...	...	...	T	6	—	3	9	—
						O	62	2	7	71	—

Defect Code No. (1)	Defect or Disease (2)						Periodic Inspections				Special Inspection
							Entrants	Leavers	Others	Total	
7	Nose and Throat	T	34	2	8	44	608	14	118	740	1
											13
8	Speech	T	72	—	4	76	450	2	34	486	1
											12
9	Lymphatic Glands	T	6	—	—	6	266	1	26	293	—
											4
10	Heart	T	10	1	—	11	190	7	36	233	1
											7
11	Lungs	T	8	—	—	8	222	21	123	366	2
											12
12	Developmental (a) Hernia	T	19	—	1	20	100	—	7	107	—
		O	100	—	7	107					—
		(b) Other	23	1	14	38					2
		O	343	14	116	473					6
13	Orthopaedic (a) Posture	T	5	3	10	18	72	11	27	110	1
		O	72	11	27	110					3
		(b) Feet	56	—	6	62					—
		O	245	5	37	287					4
		(c) Other	26	6	6	38					—
		O	145	14	30	189					10
14	Nervous System (a) Epilepsy	T	7	1	3	11	29	3	28	60	3
		O	29	3	28	60					4
		(b) Other	5	—	2	7					1
		O	67	4	21	92					1
15	Psychological (a) Development	T	14	—	27	41	249	—	143	392	1
		O	249	—	143	392					50
		(b) Stability	15	1	17	33					2
		O	941	3	163	1,107					42
16	Abdomen	T	1	1	6	8	53	4	37	94	3
		O	53	4	37	94					6
17	Other	T	10	3	2	15	323	3	98	424	2
		O	323	3	98	424					18

PART 3.— TREATMENT OF PUPILS

Table A—Eye Diseases, Defective Vision and Squint

	Number of cases known to have been dealt with
External and other, excluding errors of refraction and squint	83
Errors of refraction (including squint)	3,136
Total	3,219
Number of pupils for whom spectacles were prescribed	1,428

Table B—Diseases and Defects of Ear, Nose and Throat

	Number of cases known to have been dealt with
Received operative treatment :—	
(a) for diseases of the ear	48
(b) for adenoids and chronic tonsilitis	844
(c) for other nose and throat conditions	124
Received other forms of treatment	149
Total	1,265
Total number of pupils still on the register of schools at 31st December, 1971, known to have been provided with hearing aids :—	
(a) during the calendar year 1971	43
(b) in previous years	206

Table C—Orthopaedic and Postural Defects

	Number known to have been treated
(a) Pupils treated at clinics or out-patients departments	899
(b) Pupils treated at school for postural defects	—
Total	899

Table D—Diseases of the Skin

										Number of pupils known to have been treated
Ringworm	(a)	Scalp	...	...	...	...	...	...	...	—
	(b)	Body	...	...	...	...	...	...	...	2
Scabies	...	...	...	...	...	...	...	...	...	18
Impetigo	...	...	...	...	...	...	...	...	...	32
Other skin diseases	...	...	...	...	...	...	...	...	...	7
Total										59

Table E—Child Guidance Treatment

							Number known to have been treated
Pupils treated at Child Guidance Clinics ... ..	...	...	...	...	...	...	1,892

Table F—Speech Therapy

						Number known to have been treated
Pupils treated by speech therapists	...	...	...	...	...	821

Table G—Other Treatment Given

	Number known to have been treated
(a) Pupils with minor ailments	972
(b) Pupils who received convalescent treatment under School Health Service arrangements	29
(c) Pupils who received B.C.G. vaccination	8,605
(d) Other than (a), (b) and (c) above	4
Total (a) - (d)	9,610

2. Excepted District

REPORT OF SCHOOL HEALTH SERVICE FOR CHELTENHAM EXCEPTED DISTRICT, 1971

DR. T. O. P. D. LAWSON, SCHOOL MEDICAL OFFICER

The staff of the Cheltenham School Health Service consists of two School Doctors, two Speech Therapists, a Physiotherapist, two School Clinic Nurses, fourteen Health Visitor/School Nurses, and a clerical staff of four in the Medical Department, and, in the Dental Department, three Dental Surgeons, three Surgery Assistants and a clerk.

(i) MEDICAL INSPECTION AT SCHOOL

The routine medical inspection of school children has continued during 1971 and 3,561 children were examined throughout the year.

Children are examined :

- (a) on entry for the first time to a maintained school
- (b) during the year in which they are eight years old, and
- (c) a selective medical is carried out during the last year of their attendance at secondary school.

In addition to these routine examinations, children can be seen at any age by the School Doctor if requested by a parent, teacher or nurse.

With regard to the selective medical examinations, the parent of each child is asked to complete a questionnaire and each child has a vision test. The completed questionnaire and result of the vision test are put with the child's school medical record for the School Doctor to scrutinise and decide whether a medical examination is necessary. The Head Teachers are also consulted and can indicate any children they wish to be seen. If any parent fails to return a questionnaire, the child is selected for medical examination.

Parents are invited to be present at all examinations and if defects are found the child can be referred to the family doctor for treatment when necessary, or re-inspected at school at a later date in order to assess progress. Ophthalmic cases are referred direct to the Hospital Eye Clinics and direct referrals are also sometimes made to the Child Guidance Clinic and to the School Psychological Service.

(ii) MINOR AILMENT CLINICS

These clinics are held by appointment on Monday and Friday afternoons for children suffering from minor injuries such as sprains and abrasions, or other ailments, such as boils, warts and athlete's foot. Treatment is carried out by the School Nurses under the supervision of a School Doctor. During school holidays minor ailment clinics continue to be held on the usual days. During term time additional clinics are held weekly at Whaddon, Oakley and Elmfield Schools.

(iii) ENURESIS CLINIC

The facilities offered by the Enuresis Clinic are still very much on demand and are greatly appreciated by the parents. One of the local Consultant Surgeons has offered to see cases referred to him from the clinic when necessary.

(iv) PREVENTION OF TUBERCULOSIS

B.C.G. vaccination against tuberculosis is offered to all children of thirteen years and over. It continues to be a popular preventive measure with the parents and the acceptance rate for 1971 was 91.4%.

(v) ASCERTAINMENT OF HANDICAPPED CHILDREN

Children who fail to make satisfactory progress in the ordinary school are referred by the Head Teacher for investigation and assessment. Those children who are considered to be handicapped are reported to the Education Committee and recommended for transfer to the appropriate special school.

We have excellent co-operation with the special schools in Cheltenham and many individual cases are discussed with the Head Teachers before a final decision is made. This co-operation on an informal basis is a great help to the School Medical Officers and is in the best interests of the children concerned.

(vi) DIPHTHERIA AND TETANUS IMMUNISATION

Immunisation is always discussed as a part of the routine school medical examination and parents are urged to accept the necessary booster injections for their children.

(vii) POLIOMYELITIS VACCINATION

Booster doses of oral poliomyelitis vaccine are offered to all children soon after they commence school.

(viii) ORTHOPAEDIC DEFECTS

A physiotherapy clinic is available as part of the School Health Service. The majority of children who are referred to this clinic have either postural or foot defects and may be followed up after treatment by a School Medical Officer. Ultra-violet light therapy is also available and is of most help during the winter months.

(ix) SPEECH DEFECTS

Regular speech therapy sessions are held at the School Clinic and in various schools throughout the town.

(x) AUDIOMETRY IN SCHOOLS

The policy of testing the hearing of all schoolchildren who have reached the age of six years has continued in the Borough throughout the year. Testing is carried out by a qualified audiometrician using a portable audiometer and, when necessary, cases are followed up and referred to the family doctor or hospital as required.

Audiometry sessions are held at the School Medical Clinic during each school holiday, when the children are seen by the Audiometrician and a School Medical Officer. Children may be referred to this clinic by the School Nurse, Doctor, Parent or Teacher, if a hearing loss is suspected.

(xi) HEALTH EDUCATION IN SCHOOLS

During the year the Health Visitors gave eighty-two talks to a total of 1,789 pupils, covering the topics of Mothercraft, Personal Hygiene, Smoking, and Venereal Disease.

(xii) DENTAL SERVICE

There has been an increase in the number treated, the number of courses of treatment given and courses of treatment completed. Dental Health Education was carried out in one secondary and nineteen primary schools. Intravenous anaesthesia was used for mentally and psychologically handicapped patients and a new technique of sedation started for many who, due to fear, had previously been unable to accept treatment.

SCHOOL CLINICS

<i>Clinic</i>	<i>Address</i>	<i>Services</i>
Berkeley	Hospital	E, O
Bishops Cleeve	Tythe Barn	O, S
Bourton-on-the-Water	County Clinic, Station Road	D, S
	Moore Cottage Hospital	E
Cadbury Heath	Earlstone Crescent	D
Cheltenham	County Offices, St. George's Road	D, O, S
	33 St. Luke's Road	CG
	Health Centre, Hesters Way	O
Churchdown	County Dental Clinic, Albermarle Road	D
Cinderford	Dockham Road	E, O, S, D
	Dilke Hospital	O
Cirencester	Watermoor Road	CG, D, S
	Memorial Hospital	E
Coleford	County Clinic, High Nash	D, E, O, S
Downend	Buckingham Gardens	CG, E, S, D, O
Dursley	The Sandpits	D, E, O, S, CG
Filton	Shields Avenue, Bristol, 7	D, E, O, S
Gloucester	Quayside Wing, Shire Hall	D, EN, M, O, S
Kingswood	23 Laurel Street	D
Lydney	Church Road	D
	9 High Street	S
	District Hospital	E, O
Moreton-in-Marsh	T.A. Site, Stow Road	D, S
	District Hospital	E
Newent	County Clinic, West Block, Newent School	O
Patchway	Rodway Road	CG, D, S
Soundwell	Soundwell Road, Kingswood	E, M, O
Stroud	9 John Street	D
	Old Town Hall, The Shambles	CG, M, S, O
	Hospital	E, O
Tetbury	County Dental Clinic, The Close	D
Tewkesbury	Old Grammar School (County Clinic)	O, S, D, CG
	Hospital	E, O
Thornbury	Hospital	O
	Health Centre, Eastland Road	D, E, O, S
Winchcombe	County Dental Clinic, Back Lane	D, S, O
Wotton-under-Edge	Sym Lane	CG, D, E, O
Yate	Health Centre, Eastland Road	D, E, O, S
Cheltenham Excerpted District	County Offices, St. George's Road	D, M, S, O

Index to Services :	CG	Child Guidance	M	Minor Ailments
	D	Dental	O	Orthopaedic
	E	Eye	S	Speech
	EN	Enuresis		

1971
TABLE I—BIRTHS AND DEATHS

Districts	Estimated Population	BIRTHS								DEATHS													ALL AGES	
		Live Births				Still Births				Under 1 year			Inf. Mort. Rate per 1,000 Live Births	INFANTS				Under 1 week						
		Leg.	Illeg.	Total	Rate per 1,000 Pop.	Leg.	Illeg.	Total	S.B. Rate per 1,000 Total Births	Leg.	Illeg.	Total	Leg.	Illeg.	Total	Rate per 1,000 Live Births	Leg.	Illeg.	Total	Rate per 1,000 Live Births	No.	Rate per 1,000 Pop.		
Urban																								
Charlton Kings	10,090	122	6	128	12.7	2	—	2	15	2	2	4	31	1	2	3	23	1	2	3	23	152	15.1	
Cheltenham M.B.	75,500	910	120	1,030	13.6	3	1	4	4	15	2	17	17	13	2	15	15	13	2	15	15	847	11.2	
Cirencester	13,420	183	18	201	15.0	—	—	—	—	2	—	2	10	1	—	1	5	1	—	1	5	162	12.1	
Kingswood	30,400	577	20	597	19.6	7	1	8	13	10	—	10	17	9	—	9	15	8	—	8	13	272	8.9	
Mangotsfield	23,060	289	14	303	13.1	1	1	2	7	5	—	5	17	4	—	4	13	3	—	3	10	248	10.8	
Nailsworth	4,110	67	1	68	16.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	9.5	
Stroud	19,150	311	25	336	17.5	4	—	4	12	7	—	7	21	6	—	6	18	5	—	5	15	256	13.4	
Tewkesbury M.B.	8,780	178	12	190	21.6	2	—	2	10	2	—	2	11	—	—	—	—	—	—	—	—	94	10.7	
TOTAL U.D.	184,510	2,637	216	2,853	15.5	19	3	22	8	43	4	47	16	34	4	38	13	31	4	35	12	2,070	11.2	
Rural																								
Cheltenham	40,870	597	23	620	15.2	3	—	3	5	5	1	6	10	3	1	4	6	3	1	4	6	370	9.1	
Cirencester	16,110	238	9	247	15.3	3	—	3	12	4	—	4	16	3	—	3	12	1	—	1	4	140	8.7	
Dursley	21,240	343	13	356	16.8	2	—	2	6	4	—	4	11	3	—	3	8	2	—	2	6	209	9.8	
East Dean	21,280	330	20	350	16.4	4	—	4	11	6	—	6	17	6	—	6	17	3	—	3	9	256	12.0	
Gloucester	37,600	576	38	614	16.3	6	1	7	11	5	1	6	11	3	1	4	8	2	—	2	3	414	11.0	
Lydney	15,790	247	14	261	16.5	2	—	2	8	4	2	6	23	3	1	4	15	3	1	4	15	162	10.3	
Newent	9,360	136	4	140	15.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	106	11.3	
North Cotswold	20,300	267	17	284	14.0	3	—	3	10	3	—	3	11	1	—	1	4	1	—	1	4	219	10.8	
Northleach	7,070	87	10	97	13.7	1	1	2	20	—	—	—	—	—	—	—	—	—	—	—	—	85	12.0	
Sodbury	67,290	1,307	49	1,356	20.2	16	1	17	12	20	1	21	15	13	1	14	10	11	1	12	9	522	7.8	
Stroud	30,520	457	30	487	16.0	7	1	8	16	3	1	4	8	2	—	2	4	2	—	2	4	371	12.2	
Tetbury	7,060	98	3	101	14.3	1	1	2	19	2	—	2	20	1	—	1	10	1	—	1	10	93	13.2	
Thornbury	42,760	729	31	760	17.8	5	1	6	8	12	—	12	16	6	—	6	8	4	—	4	5	354	8.3	
Warmley	24,090	309	7	316	13.1	2	—	2	6	—	—	—	—	—	—	—	—	—	—	—	—	180	7.5	
West Dean	17,840	263	17	280	15.7	5	—	5	18	6	—	6	21	5	—	5	18	4	—	4	14	245	13.7	
TOTAL R.D.	379,180	5,984	285	6,269	16.5	60	6	66	10	74	6	80	13	49	4	53	9	37	3	40	6	3,726	9.8	
County Totals	563,690	8,621	501	9,122	16.2	79	9	88	10	117	10	127	14	83	8	91	10	68	7	75	8	5,796	10.3	

The rates shown are the crude rates.

TABLE II—SUMMARY OF INFECTIOUS DISEASES

Districts	Scarlet Fever	Whooping Cough	Measles	Dysentery	Acute Enceph- alitis	Malaria	Food Poisoning	Infective Jaundice	Tetanus	Meningo- coccal Infection	Tuber- culosis Pulmonary	Tuber- culosis Other
Urban												
Charlton Kings	1	4	7	—	—	—	—	1	—	—	1	—
Cheltenham M.B.	1	43	93	—	—	—	3	4	—	—	12	7
Cirencester	2	5	143	18	—	—	—	4	—	—	—	—
Kingswood	4	15	199	3	1	—	—	3	—	1	2	2
Mangotsfield	5	16	139	—	2	—	—	—	—	—	3	—
Nailsworth	3	12	10	—	—	—	—	1	—	—	—	—
Stroud	—	7	231	—	—	—	—	—	—	—	2	—
Tewkesbury M.B.	—	2	64	—	—	—	9	2	—	—	1	—
TOTAL U.D.	16	104	886	21	3	—	12	15	—	1	21	9
Rural												
Cheltenham	11	7	230	—	—	—	5	1	—	—	1	1
Cirencester	1	1	109	14	—	—	—	1	—	—	—	—
Dursley	3	—	75	—	—	—	—	35	—	—	1	—
East Dean	2	9	380	—	—	—	—	1	2	—	2	—
Gloucester	16	8	242	—	—	—	3	6	—	—	5	—
Lydney	1	—	30	—	—	—	4	1	—	—	3	1
Newent	1	14	303	1	—	—	—	—	—	—	—	—
North Cotswold	—	9	82	—	—	1	3	1	—	—	2	—
Northleach	—	—	11	—	—	—	—	1	—	—	—	—
Sodbury	9	18	256	16	2	—	2	12	—	—	8	2
Stroud	6	2	188	—	—	—	1	9	—	—	—	—
Tetbury	1	5	11	—	—	—	—	—	—	—	2	—
Thornbury	5	9	140	—	2	—	2	11	—	—	2	—
Warmley	3	22	142	5	—	—	—	—	—	—	1	—
West Dean	3	2	349	—	—	—	—	3	—	—	3	—
TOTAL R.D.	62	106	2,548	36	4	1	20	81	2	—	29	4
County Totals	78	210	3,434	57	7	1	32	96	2	1	50	13

TABLE III—CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE

Causes of Death	Total all ages	Under 4 weeks	4 weeks and under 1 year	1 -	5 -	15 -	25 -	35 -	45 -	55 -	65 -	75 and over
B												
4 Enteritis and other Diarrhoeal Diseases	3	—	2	—	—	—	—	—	—	—	1	—
5 Tuberculosis of Respiratory System	8	—	—	—	—	—	—	—	—	—	2	—
6 (1) Late effects of Respiratory Tuberculosis	4	—	—	—	—	—	—	—	1	2	1	4
6 (2) Other Tuberculosis	3	—	—	—	—	—	—	1	1	1	—	—
17 Syphilis and its Sequelae	1	—	—	—	—	—	—	—	—	—	—	—
18 Other Infective and Parasitic Diseases	13	—	—	2	1	1	—	—	2	1	1	—
19 (1) Malignant Neoplasm—Buccal Cavity, etc.	9	—	—	—	—	—	1	—	1	—	—	6
19 (2) Malignant Neoplasm—Oesophagus	34	—	—	—	—	—	—	1	2	—	3	4
19 (3) Malignant Neoplasm—Stomach	115	—	—	—	—	—	—	1	7	6	15	10
19 (4) Malignant Neoplasm—Intestine	192	—	—	—	—	—	1	5	20	25	51	31
19 (5) Malignant Neoplasm—Larynx	11	—	—	—	—	—	—	—	1	28	65	73
19 (6) Malignant Neoplasm—Lung, Bronchus	267	—	—	—	—	—	1	4	1	1	4	5
19 (7) Malignant Neoplasm—Breast	114	—	—	—	—	—	—	5	23	77	106	56
19 (8) Malignant Neoplasm—Uterus	41	—	—	—	—	—	—	—	23	28	35	23
19 (9) Malignant Neoplasm—Prostate	43	—	—	—	—	—	—	—	7	16	9	9
19 (10) Leukaemia	28	—	—	1	2	5	—	—	1	6	16	20
19 (11) Other Malignant Neoplasms	317	—	—	1	4	2	5	14	43	75	90	83
20 Benign and Unspecified Neoplasms	12	—	—	—	—	1	1	—	1	2	3	4
21 Diabetes Mellitus	39	—	—	—	—	—	1	1	1	3	10	23
22 Avitaminoses, etc.	1	—	—	—	—	—	—	—	—	—	—	1
46 (1) Other Endocrine, etc., Diseases	22	—	2	1	2	1	—	—	—	—	—	—
23 Anaemias	11	—	1	—	—	—	—	1	1	2	6	6
46 (2) Other Diseases of Blood, etc.	4	—	—	—	—	—	1	—	—	1	3	6
46 (3) Mental Disorders	11	—	—	—	1	—	—	1	1	—	2	—
24 Meningitis	5	3	—	1	—	—	—	—	—	2	2	5
46 (4) Multiple Sclerosis	8	—	—	—	—	—	—	—	—	—	—	1
46 (5) Other Diseases of Nervous System	49	—	3	1	1	1	1	2	4	4	2	1
26 Chronic Rheumatic Heart Disease	66	—	—	—	—	—	—	5	11	18	15	20
27 Hypertensive Disease	95	—	—	—	—	—	1	2	2	18	19	13
28 Ischaemic Heart Disease	1,493	—	—	—	—	—	1	—	22	21	21	48
29 Other forms of Heart Disease	318	—	—	—	—	—	1	—	102	246	444	678
30 Cerebrovascular Disease	803	—	—	—	—	—	2	2	6	20	49	242
46 (6) Other Diseases of Circulatory System	281	—	—	—	1	1	1	5	24	85	186	503
31 Influenza	9	—	—	—	—	—	—	—	6	26	66	176
32 Pneumonia	432	7	5	—	2	1	2	3	4	32	78	298
33 (1) Bronchitis and Emphysema	248	—	1	—	—	—	—	2	7	37	101	100
33 (2) Asthma	12	—	—	—	1	2	2	—	3	2	—	—
46 (7) Other Diseases of Respiratory System	63	—	2	1	—	—	1	1	6	9	10	33
34 Peptic Ulcer	47	—	—	—	—	—	1	1	5	6	12	22
35 Appendicitis	1	—	—	—	—	—	—	—	—	—	—	—
36 Intestinal Obstruction and Hernia	18	—	1	—	—	—	—	—	1	3	1	—
37 Cirrhosis of Liver	19	—	—	—	—	—	—	—	3	6	3	10
46 (8) Other Diseases of Digestive System	67	—	—	—	—	2	1	2	5	10	11	36
38 Nephritis and Nephrosis	31	—	—	—	—	—	—	1	2	7	13	8
39 Hyperplasia of Prostate	14	—	—	—	—	—	—	—	—	2	4	8
46 (9) Other Diseases, Genito-Urinary System	32	—	—	—	—	—	—	1	4	8	7	12
41 Other complications of Pregnancy, etc.	3	—	—	—	—	—	1	2	—	—	—	—
46 (10) Diseases of Skin, Subcutaneous Tissue	3	—	—	—	—	—	1	—	—	—	—	—
46 (11) Diseases of Musculo-Skeletal System	20	—	—	—	—	—	—	2	1	1	6	10
42 Congenital Anomalies	46	22	7	6	3	2	1	2	1	1	—	1
43 Birth Injury, Difficult Labour, etc.	34	34	—	—	—	—	—	—	—	—	—	—
44 Other causes of Perinatal Mortality	26	25	—	—	1	—	—	—	—	—	—	—
45 Symptoms and ill-defined conditions	36	—	8	—	—	—	—	—	—	—	—	—
E47 Motor Vehicle Accidents	76	—	—	5	4	23	7	5	7	11	8	26
E48 All other Accidents	89	—	3	6	—	11	14	6	10	8	10	6
E49 Suicide and Self-Inflicted Injuries	34	—	—	—	1	—	4	5	6	8	7	21
E50 All other External Causes	15	—	1	—	—	1	2	1	2	4	2	3
Total all causes	5,796	91	36	25	24	54	56	106	360	855	1,519	2,670

