[Report 1932] / Medical Officer of Health and School Medical Officer of Health, Swindon Borough.

wellcome collection

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

Borough OF Swindon

Annual Report

— OF THE —

Medical Officer of Health

FOR THE YEAR 1932

AND THE

Isolation Hospital Annual Report

From the 1st April, 1932, to the 31st March, 1933

by DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.

Report of the Chief Sanitary Inspector

FOR THE YEAR 1932

Annual Report

— OF THE —

School Medical Officer

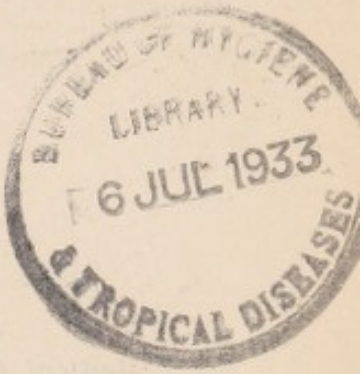
FOR THE YEAR 1932

PRINTED BY THE SWINDON PRESS LTD., NEWSPAPER HOUSE, SWINDON.

Contents.

PUBLIC HEALTH REPORT:—

SCHOOL MEDICAL REPORT:—



BOROUGH OF SWINDON.

HEALTH COMMITTEE:

Chairman—Alderman MRS. M. GEORGE.

Vice-Chairman—Councillor F. E. ALLEN.

Members:

THE MAYOR (Alderman W. R. ROBINS).

Alderman	A. E. HARDING	Councillor	L. J. NEWMAN
,,	A. W. HAYNES	,,	F. E. AKERS
,,	G. H. HUNT	,,	MRS. S. ANDREWS
,,	R. GEORGE	,,	S. E. WALTERS
Councillor	T. MANNING	,,	A. H. JAMES
,,	M. ASHBY	,,	L. M. SUTTON
,,	A. THOMPSON	,,	A. H. WHEELER.
,,	C. C. PRICE		

MATERNITY AND CHILD WELFARE SUB-COMMITTEE:

Chairman—Councillor MRS. S. ANDREWS.

Members:

Alderman	Mrs. M. GEORGE	Councillor	A. H. JAMES
,,	A. E. HARDING	,,	L. M. SUTTON
,,	A. W. HAYNES	,,	F. E. ALLEN
,,	G. H. HUNT	,,	A. H. WHEELER
,,	R. GEORGE	Miss	K. J. STEPHENSON
Councillor	T. MANNING	Miss	D. P. CHAPPELL
,	M. ASHBY	Mrs.	ARNOLD FORSTER
	A. THOMPSON	Mrs.	WESTON
,	C. C. PRICE	Mrs.	SCHMITZ
,	L. J. NEWMAN	Miss	I. F. MOORE.
,	F. E. AKERS	Mrs.	L. E. FRY.
,	S. E. WALTERS		

Town Clerk—W. H. BENTLEY, ESQ.

BOROUGH OF SWINDON.

PUBLIC HEALTH DEPARTMENT.

STAFF:

Medical Officer of Health, School Medical Officer and Medical Superintendent of the Isolation Hospital and Maternity Home.

DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.

Deputy Medical Officer of Health.

J. STEVENSON LOGAN, M.B., Ch.B., D.P.H.

Assistant Medical Officer of Health.

VIOLET KING, M.B., Ch.B.

Chief Sanitary Inspector.

F. H. BEAVIS.

Certificate of the Royal Sanitary Institute.
Certificate of the Royal Sanitary Institute for Meat Inspection.
Certificate in Building Construction.

Assistant Sanitary Inspectors.

H. A. BANWELL.

Certificate of the Royal Sanitary Institute.
Certificate of the Royal Sanitary Institute for Meat Inspection.
Certificate of the Worshipful Company of Plumbers and Final Certificate City and Guilds.
Certificate in Hygiene.

R. N. HUGHES.

Certificate of the Royal Sanitary Institute and Sanitary Inspectors Examination Joint Board.
Certificate of the Royal Sanitary Institute for Meat Inspection
Liverpool University Certificate in Meat and Food Inspection.
Liverpool University Certificate in Sanitary Science.

F. R. G. SELWOOD.

Certificate of the Royal Sanitary Institute.

Head Clerk—ERNEST A. BEASANT.

Assistant Clerks—W. M. WATTS
W. H. PAUL
F. YATES.

PUBLIC HEALTH DEPARTMENT. **STAFF**—Continued.

Assistant Clerk and Clinical Assistant—Miss E. M. KEY.

Matron of the Isolation Hospital.
Miss J. McKINNON SMITH, A.R.R.C.

Matron of the Maternity Home and Training Centre.
Miss F. R. SILLICK.

Health Visitors.

Miss M. HANNA.
3 years General Training.
State Registered Nurse.
Certificate of the Central Midwives Board.

Miss M. JOHNS.
3 years Certificate of Hospital Training.
State Registered Nurse.
Certificate of the Central Midwives Board.
Queen's Nurse.

Miss M. HUGHES.
4 years Certificate of Hospital Training.
State Registered Nurse.
Certificate of the Central Midwives Board.
Health Visitor's Certificate of the Royal Sanitary Institute.

Disinfector—G. GREENAWAY.

Voluntary Helpers at Maternity Centres—

Mrs. E. SCHMITZ
Mrs. OSMOND
Mrs. WESTON
Mrs. HUMPHRIES
Mrs. HULANCE.

LIST OF CONSULTANT & SPECIALIST STAFF.

MATERNITY DEPARTMENT.

Obstetricians on the Rota:

A. W. Bennett, M.R.C.S. (Eng.), L.R.C.P. (Lond.).

J. Holland, M.B., B.Ch., B.A.O.R.U.I.

S. J. C. Mackay, M.B., Ch.B.

W. Glasgow, M.B., Ch.B.

Honorary Consulting Physician:

T. P. Berry, M.D. (Lond.), M.R.C.S., L.R.C.P.

Consulting Surgeon:

J. Ewart Schofield, F.R.C.S. (Eng.), M.B., Ch.B.

Consulting Obstetrician:

A. W. Bennett, M.R.C.S. (Eng.), L.R.C.P. (Lond.).

Ophthalmic Surgeon:

Oliver B. Pratt, M.A., M.B., B.Ch., D.O. (Oxon), M.R.C.S., L.R.C.P.

Surgeon for Throat, Nose and Ear Diseases:

F. Courtenay Mason, B.A. (Lond.), M.S., M.B., B.S., F.R.C.S. (Eng.).

Orthopædic Surgeon:

M. F. Forrester Brown, M.D. (Lond.), M.S.

Cardiologist:

C. E. K. Herepath, M.D. (Lond.), M.B., B.S., M.R.C.S., L.R.C.P. (Lond.).

Honorary Consultant for Nervous and Mental Diseases:

Sydney J. Cole, M.A. (Oxon), B.A., M.D., M.B., Ch.B.

To the Chairman and Members of the Health, etc., Committee.

LADIES AND GENTLEMEN,

The year 1932 was dominated by the financial crisis ringing frequently, and sometimes discordantly, a note of economy in all the social services. But so far as the public health service is concerned, it has been recognized on all hands for some years past that though economy in its administration is not only desirable but essential, it is not feasible, as it might be with other services, to suggest any curtailments or alterations which are generally applicable, so those who are most desirous of reducing national and local expenditure are content merely to ask that the health services should be continuously revised with a view to their being administered at the least possible cost compatible with efficiency.

Since modern public health, if it is to produce the benefits which can be extracted from it, must be brought definitely into the homes of the people and become part and parcel of their everyday lives, it follows that what is beyond their purse is of little or no benefit and preventive medicine, unless it is homely and not showy, defeats its object. It is, therefore, advisable periodically to re-valuate all public health functions, to discard such as produce no adequate return for the expense and labour they entail, to refurbish those which might be better or more economically performed and to introduce such new measures as the advance of science renders advisable and experience proves to be feasible. It is tacitly accepted that the present economic difficulties give a favourable opportunity for such re-valuations on a large scale, but from this opinion I most cordially dissent, for to re-valuate with the preconception of economy in expenditure must bias the judgment and cause the retention of what is cheap, but useless, and the rejection of what, though it may be costly, is of good value.

When the financial condition of the country began to look very black and local prosperity was darkened by increasing unemployment and reductions of income, I had to point out to you that every fall in the town's prosperity increased the work and consequent expense of the Health Department and that curtailment of expenditure in other directions often automatically shifted the burden to public health, from which it could not be passed on. The truth of this became obvious with the supply of free milk to necessitous expectant and nursing mothers. In prosperous times this expense had been trivial, but as prosperity declined, this provision was the first to feel it and so this year, when everybody is looking for economies in every direction, you must expect a large increase in the expense of this and some other public health measures.

Diminishing prosperity increases the difficulties of housing and nourishing the people. Economic rents cannot be paid and requisite nourishment can be obtained only with difficulty. In the remote past, times of depression were accompanied by famine and pestilence. In the near past, the former had been reduced from starvation to deficiency and the latter from widespread scourges to increase of such diseases as are always more or less with us. At the present time, there is no reason why the economic depression should seriously interfere with nutrition, or increase the prevalence of disease, for the advances that have been made in supplying the food needs of the population and the vast increase in our knowledge of practical physiology enable us to maintain the nutrition of everybody under the most difficult and exacting conditions which we are likely to have to face, and the increase in our knowledge of the control of disease has been so rapid that it is more than capable of overtaking any increased liability to disease which may result from increasing economic difficulty. But although times of difficulty offer modern preventive medicine the opportunity to exert its power, it can only rise to the occasion if it is administered with precision and in accordance with the teaching of science. It is therefore called upon to put into operation, without delay, all means of prevention which research has suggested might be useful and experience has proved to be valuable, and to jettison with equal celerity and vigour the ornamental and fanciful traditions which, though they have a certain picturesque historical interest, are false in theory and impeding in action. The difficulties of turning the public mind from traditions to which it has grown accustomed to the acceptance of modern science are very formidable, but without it we can make no progress, for it is utterly impossible to work modern scientific processes in an atmosphere of falsehood or ignorance.

In the early days of sanitary reform, when it was first clearly recognized that the health of the community was its greatest asset and that this was largely within our power to control, attention was mainly directed to the physical environment. This entailed attention to such matters as drainage, water supply and so on, which were general to the community rather than special to its units and it was neither necessary, nor indeed possible, for the citizens to give much help in their individual capacity. But when the gross abuses of the community had been cleared away, when the communities themselves had been rendered fairly respectable, it became evident that further improvements in the health of the people could be effected only by individual management of the citizens and that for this to be successful they must make personal effort. Given a physical environment in which healthy life is possible, it will depend upon the way the citizens manage their own lives whether they will achieve that degree of

health which the improvement in their surroundings has made attainable, so, in order that they may make the best of their opportunities, it is essential that they should be educated in the broad principles of human biology. That they may be well fed, well clothed, protected from disease and able to balance their minds and bodies to sway evenly with the varying ups and downs and good and bad influences which make up life, they must have some knowledge of the way in which life is maintained and the requirements of its various functions. Education of the people has, therefore, become the first element in successful public health. It is fraught with great difficulty. The human being is far from a simple organism. It is out of the question to expect anybody to know very much about it and it is particularly difficult to explain in simple language what it is essential to know in order to protect it from damage by adverse circumstances.

Three main tasks confront every human being: first, to maintain his nutrition; secondly, to adjust his mind to his environment; and, thirdly, to maintain his position in competition with other organic beings which live parasitically upon him. Of these three, the first is the simplest and is the best known. It is also the easiest to convey to the people; in fact, the requirements of nutrition can be stated in few and simple words which are readily grasped and easily acted upon and as the essentials are neither difficult nor expensive to supply, a population properly trained can maintain its nutrition fully under circumstances of depression and poverty greater than that which we are ever likely to experience. Psychological adjustment is far more difficult to teach and not by any means always easy of attainment; whilst the maintenance of health in competition with parasites requires something more technical than the individual citizens can do for themselves. How best the people may be educated into the way of health is a matter not easy to answer and must depend to a large extent upon the individuality of those who attempt it.

In Swindon we have tried to educate the people to look after their own health. Whether the way we have used is the best available we cannot say. That it has met with a considerable measure of success cannot be denied, though it is easy enough to point out certain deficiencies and some means of attack used which are not to the taste of everybody.

Reviewed as a whole, the public health scheme of the Borough now functions to deal with all citizens from conception up to the age of 16, and for all women in their reproductive capacity. A scheme to complete the fusion of the infant and school children sections is in course of construction and when that is in operation we shall claim that the framework of our scheme is completed. Embellishments will require to be added from time to time, but nothing which is likely to alter materially the

existing system. We have every reason to be pleased with the structure. It admits of the solution of every difficulty which can confront it and of picking up and incorporating any machinery useful for the furtherance of child health which may from time to time become available.

For attending to the health of the citizens after the age of 16 there are less satisfactory arrangements and with these the public health office, as at present constituted, has but little to do. There is, however, one period of life, perhaps the most important of all, namely, early adolescence, i.e., the ages between 16 and 20, for which existing provisions are most inadequate. This is the great blot on the English public health system. We have, during the past few years, put out certain feelers into this age period, realizing that the time must come when the country will give serious attention to the training of its adolescents and not leave it to street corners and Hollywood. The children who remain at the secondary schools after the school leaving certificate are kept under observation from the Health Office, and many children whose earlier years have been difficult are welcome to such attention as we can give them until they come under the Insurance Act. We have also done something to keep in touch with young women between the age when they leave school and the time when they become mothers. The experience gained by this unofficial experimental work is likely to prove very valuable, for the problems of this age period are quite different from those of childhood and of adult life. Two of the major problems of this age period, so far as physical health is concerned, are pulmonary tuberculosis and ex-ophthalmic goitre and, on the mental side, the early stages of the neuroses and the so-called nervous breakdowns. It appears to us that solutions of these problems are far from impossible, but that these and kindred problems can never be solved until they are studied systematically.

A great difficulty in modern public health is to fit it all in with the other functions of sociology. It is in this direction where the practice of medicine has, up to the present, so signally failed. In acute disease, complete interference with the life of the citizen is feasible. He can and should be taken out of the community and treated as a separate unit, for which all the facilities possessed by man should be available. Cost is a question of minor importance, for though it may be great for the time, it operates for but a brief period. A person, whoever he is, whether prince or pauper, who is suffering from pneumonia, should be able to command everything which science and civilization can give him and, if he cannot pay for it himself, it is a financially sound investment for the community to pay it for him. But with more chronic conditions, particularly those that are lifelong, such an ideal, though highly acceptable to medicine,

is not acceptable to the community, nor to the individual sufferer. A citizen with asthma, with chronic heart disease, or with a paralysed limb cannot in fairness to himself or to the community be treated as an invalid. He has got to get along with his disability and it is essential for us to help him to make the best of it. This very often entails a form of treatment which is by no means such as would be most satisfactory from the purely medical standpoint. There are circumstances where a year's holiday, a sea voyage, a change of residence to a foreign country, or a diet of oysters and champagne might be distinctly beneficial medicinally; but if the result to the citizen is to be an improvement in his disease and the wreckage of his life, more harm than good will be done.

There are citizens who from physical, or mental disability are not and cannot be made useful, either to themselves, or to the community. These must be a perpetual charge upon the community, which, since there are prejudices against euthanasia, must bear the total cost of their existence. We would point out that though the management of such unfortunates is considered to be part of public health work, it really has nothing to do with public health; in fact very much the reverse. Speaking as the guardian of the public health of the community, one would say without hesitation that a citizen who is not and cannot be made self-supporting is a menace to public health and should be destroyed. Humanity recoils from such a doctrine, so we are willing, though not without a certain amount of grumbling, to stand the expense of caring for such people; but the bill should not be debited to public health, but to humanity. Considering how precious little of the world's goods are doled out to either function, it should not be of much consequence to which the account is rendered, but those who are always clamouring for reduction in the social services require to have brought before them pretty clearly and bluntly that a large amount of expenditure on the social services is an oblation to the conscience of those who do not themselves need to profit materially by the services which the community renders to the less fortunate.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Miss M. E. Butler, assistant clerk and clinical assistant, resigned in March, 1932, and was replaced by Miss E. M. Key. Otherwise, there was no change in the personnel of the department during the year.

GENERAL PUBLIC HEALTH AND SANITATION OF THE TOWN.

Beyond progress with the new waterworks at Latton, there is no change in the general sanitation of the town and no other

work that is of major importance was either started or finished during the year.

HOUSING.

During the year eight new houses were built by the Corporation and 144 by private enterprise. The Corporation, however, started building another 100 houses during the year and these will be ready for occupation during 1935. Against these, there will be some slackening of houses built by private enterprise.

There is now no lack of suitable houses in the town for anybody who can afford to buy them and the general housing problem has shifted from the position in which lack of houses was the main difficulty, to the more primitive and difficult position in which good houses are available but beyond the means of those who need them, and bad and indifferent houses continue to be occupied in large numbers. The housing position in Swindon is nothing like so bad as it is in most of the industrial districts of England, but this adds to, rather than detracts from, the difficulties of progress. There are, indeed, no houses in Swindon which are uninhabitable, but there are a large number which ought not to be inhabited and should be demolished and replaced by more modern buildings.

It is somewhat difficult to say anything about housing without touching upon political questions, though it is gratifying to see that of recent months the housing problem shows signs of being freed from political influences and all classes of the community (except the owners of unsavoury property) are coming to look upon the housing of the population with a broader view.

The position in Swindon is rather unusual. We have nothing that can be called a slum, or could be dealt with as a slum; nor is there any part of the town which could conveniently be dealt with as an improvement area, so any improvements that we make must be in the direction of patching up or replacing individual houses. The major part of Swindon consists of long rows of terrace houses, not particularly crowded, mainly in a fair state of repair, but gradually deteriorating both absolutely and relatively to modern ideas of comfort and convenience. An unusually large proportion of the houses are owned by the occupiers. This is always considered to be highly commendable and so it is from some points of view; but there are very considerable drawbacks to the ownership of property by persons who have to work for their living. In the first place, the majority of these owners have not finished paying for their houses. When times are prosperous and employment good and regular, the repayment of the loans upon these houses is no particular hardship,

but if the owner looses his employment he is caught in a noose which very often strangles him. He must either surrender his property, always at a loss, or else curtail his expenses in other directions so as to leave him with insufficient money to maintain the nutrition of himself and his family. His property binds him to one district, so that he is no longer free to sell his services in the best market. This perhaps does not matter much at the present time as there is nothing to do anywhere, for you can starve just as comfortably in one place as another, and perhaps better in your own house than in a lodging. Another drawback of the owner-occupier is that he adds to the difficulty of improvement schemes, for very often his house is kept in much better condition than those rented by his neighbours and a block which should come down in its entirety may be kept up indefinitely. Yet, on the whole, the man who owns his own house, even though he has not finished paying for it, is generally in a better position than he who has to rent his lodging, for in the latter case he is to a great extent at the mercy of his landlord and under any circumstances has to pay a rent which is nearly always exorbitant. Recent researches into the financial and social conditions of wage-earners have shown clearly that at least half of the difficulties in their struggle is the high price that has to be paid for lodging, and this price seldom bears any relation to what is obtained for it. As a consequence, workers earning a good wage which should be quite sufficient to support them and their families, are actually forced below the poverty line as regards nutrition, owing to the excessive proportion of their incomes which has to go in the payment of rent.

In present circumstances nutrition can be maintained at a cost of 7/– per week per man unit. This sum is frequently unobtainable, even in families which are considered to be fairly well off. From the point of view of health, nutrition is of far greater importance than housing, but in times of difficulty it is impossible to reduce the amount spent on housing in order to free it to supply nutrition, for cheaper accommodation cannot be got. The supply of houses for the wage-earning community, of houses that are fit to live in, at a rent which can be reasonably paid, has become the most pressing need of our civilization and it must be satisfied.

Those who will not face the housing problem disinterestedly try to smother their conscience with what is known as the "uplift theory," i.e., that by building houses of a superior type there is a gradual shift upwards of the population. Nobody with any sense can subscribe to such a doctrine, and experience has proved that this uplift does not occur. The only way in which improvement can be effected is by destroying the worst property and re-housing those displaced in respectable property. It has been

argued that the slum dweller is the cause of the slums and that if he is removed from his habitat into another, he will convert it into a slum. Experience has proved that this is not true, for though there is a small proportion of the population which cannot be redeemed, the vast majority can be made respectable if they are placed in a position where civic virtue is a possibility.

INSPECTION AND CONTROL OF FOOD STUFFS.

Swindon is not an authority to carry out the Sales of Foods and Drugs Acts, this work being a County function. The Borough, however, is responsible for carrying out the Public Health Acts which relate to food. At the present time, as may be gathered from the latest report of the Ministry of Health, sophistication and adulteration of food stuffs is infrequent. The low price of commodities and the severe penalties for roguery have made adulteration unprofitable, but there are two forms of food offences which are still frequent and would be much more frequent if inspection were relaxed. They are the sale of diseased meat and of watered or dirty milk. The prevention of unsound meat reaching the public is one of the major works of the sanitary inspectors. It is made as difficult and complicated as it can be by the continuance of private slaughterhouses, both within and without the Borough. In 1932, however, we were able to inspect every animal slaughtered for human food in the Borough and can be quite satisfied that nothing has got through which is not fit to eat. But we have difficulty with meat which is brought into the Borough in a dead state. Fortunately, the penalties for infringing the regulations are severe and anybody who is caught is unlikely to repeat the offence.

With milk there are many difficulties. Fortunately we have few troubles, because Wiltshire, being a milk-producing County, milk of excellent quality is available in abundance. From the reports of the County Analyst it appears that the milk sold in Swindon is rarely tampered with and from the bacteriological examinations that we do from time to time in Swindon we are satisfied that, in general, the local milk is good and clean. But "The Appeal to the Cow" is still good law, maintaining in our legislature the spirit of the late W. S. Gilbert.

MATERNITY AND NURSING HOMES.

There are four maternity and nursing homes on the register, as follows:—

Name of Home.	No. of cases for which accommodation is available.	Class of cases taken.
"The Haven" Maternity Home	3	Maternity. Occasional general cases (clean only) are taken when no maternity work is booked.
Cheriton Nursing Home ..	12	2 beds for Maternity cases; the remainder for general.
Glenwood Nursing Home ..	12	General & occasional Maternity.
Padstow Cottage	2	General Nursing.

NURSING IN THE HOME.

Swindon has a District Nursing Association with two nurses, not under the control of the Corporation.

LABORATORY FACILITIES.

There was no change in the arrangements for the examination of clinical material. Most of this work is done at the Health Office, but where biological or special methods are required, specimens are sent to Bristol or Liverpool University.

HOSPITALS.

There was no change in the hospital system in Swindon during 1932.

CHILDREN ACT, 1908.

The three Health Visitors are the Infant Protection Visitors under this Act. There were on the register at the end of 1932 29 boarded-out children under the age of seven. These are kept under supervision and in every case conditions are satisfactory.

The Act of 1932 did not come into force until the 1st January, 1933, but it was necessary to get ready for its introduction towards the end of 1932. The new Act is a great improvement upon the old Act of 1908 and eventually should prove to be rather easier to enforce.

Maternity and Child Welfare.

ANNUAL STATISTICS RELATING TO THE MATERNITY HOME, 1932.

	Borough	County	Total
(1) Number of cases in the Home on 1st January, 1932. ...	11	—	11
(2) Number of cases admitted during 1932 ...	327	87	414
(3) Number of cases remaining in the Home on 1st January, 1933. ...	8	6	14
(4) Average duration of stay.	13.44 days	14.24 days	—
(5) No. of cases delivered by :—			
(a) Midwives ...	249	70	319
(b) Doctors ...	38	5	43
No. of cases in which no delivery took place. ..	40	12	52
(6) No. of cases in which medical assistance was sought by the midwife.	169		
(7) No. of cases notified as:—			
(a) Puerperal Fever	(a) —		
(b) Puerperal Pyrexia.	(b) 38*		
(8) No. of cases of pemphigus neonatorum. ...	—		
(9) No. of cases notified as ophthalmia neonatorum, with result of treatment in each case. ...	—		
(10) No. of infants not entirely breast-fed while in the Institution. ...	6		
(11) No. of maternal deaths, with causes. ...	2 Both admitted moribund with eclampsia.		

* Only 5 of these are notifiable.

ANNUAL STATISTICS RELATING TO THE MATERNITY HOME, 1932.—Continued.

(12) No. of foetal deaths :—	
(a) still-born ...	(a) 26
(b) within 10 days of birth ...	(b) 5
showing the cause of death in each case, and results of post-mortem examination (if obtainable).	There were 3 abortions. 26 still-births, of which 9 were macerated and 17 fresh. Causes of death : Congenital defects of the nervous system :— Anencephaly ..... 5 Hydrocephalus ..... 1 Spina bifida ..... 2 Connected with disease of the mother :— Ante-partum haemorrhage 4 (2 full term and 2 premature) Eclampsia ..... 2 Connected with difficulty in delivery :— Extended breech ..... 3 Long delayed occiput ..... 2 Cause unknown :— 6 macerated, 1 no explanation Deaths within 10 days :—5 Malformations of the nervous system :— Hydrocephalus ..... 1 Spina bifida ..... 1 Connected with disease of the mother :— Ante-partum haemorrhage 1 Toxaemia ..... 1 Hemiplegia, probably injury at birth ..... 1 One death occurred on the 12th day, a feeble premature infant of 36 weeks. Cause of death uncertain.

Of the 362 cases delivered in the Maternity Home, 42 were delivered by forceps, giving a forceps rate of 11.3%. There were 82 cases of ruptured perineum, giving a rate of 22.65%. These are the lowest rates that we have ever recorded. They are partly to be explained by the fact that since the new Maternity Home has been opened there has been more available accommodation for normal cases than was formerly the case. The stillbirth rate, 71.82 per 1,000, is very high indeed, though this is set off to some extent by the low rate of deaths during the first ten days, namely, 13.81 per 1,000. The proportion of macerated foetuses was extraordinarily high and still more remarkable was the high proportion of defects in the formation of the nervous system, for not only were there 9 which were fatal in hospital, but several cases which survived. The suggestion that this high rate of dead, decomposed and malformed products of conception is due to interference with pregnancy is one that is easier made than proved. The malformations originate at an early date of conception, a date so early that they cannot be influenced by attempts at abortion, though they might be influenced by the woman taking the various popular remedies for "irregularities."

There were no induced abortions in the Home, but 11 inductions of viable infants. There were two cases of Caesarean section, seven cases of placenta praevia and ante-partal bleeding, nine of eclampsia and toxaemia, and one of mania. The last had to be removed to a mental hospital where she died two days later.

EXTERN MIDWIFERY DEPARTMENT.

There were 143 deliveries and 5 miscarriages, and 3 cases transferred to the Maternity Home during 1932. Amongst these 143 deliveries were 5 stillbirths and 2 infant deaths within the first ten days.

During the year, 22 probationers were under instruction. Of these, 14 obtained the certificate of the Central Midwives Board and 3 resigned.

REPORT ON WORK DONE AT THE MATERNITY CLINIC, 1932.

(By Dr. Violet King, Assistant Medical Officer of Health).

The Maternity Clinics were well attended during the year, and more than twice as many mothers were referred to the special consulting clinic at the Maternity Home, than were sent the previous year.

All the mothers suffering from goitre, save for three, received treatment.

218 of the births were first deliveries.

The 18 cases admitted to the Home for ante-natal supervision and treatment comprised 6 cases of toxaemic signs, 4 for version, 4 for early rupture of membranes, 1 case of disproportion, 1 of prolapse of cervix and 2 of excessive vomiting, one of which had a high blood pressure.

There was a large number of foetal abnormalities, and the numbers of still-births and neo-natal fatalities showed a considerable increase.

There were no cases of eclampsia and no maternal deaths.

V. REDMAN KING,

Asst. Medical Officer of Health.

Public Health Department,
61, Eastcott Hill,
Swindon.

STATISTICS RELATING TO THE MATERNITY CLINIC, 1932.

Total number of mothers attending Ante-natal Clinics	512
No. of new cases	296
Attendances at Doctor's Clinic	1035
Attendances at Matron's Clinic	1737
Attendances at Consultant's Clinic	74
	2846

No. of cases referred to Consultant's Clinic	52
No. of cases referred to own doctor	24
No. of cases referred to Dental Clinic or Great Western Medical Fund Dental Department	25
No. of urines tested	1761
Gynaecological and post-natal cases	3
Doubtful pregnancy	2
Admitted to Maternity Home for ante-natal observation and treatment	18

Conditions found at Clinics:—

Albuminuria	46
Contracted pelvis	2
Prolapse	2
Varicose veins	67
Fits	1
Chorea	1
Cardiac disease	2
Pyorrhoea	9
Anaemia	2
Sciatica	22
Enlarged thyroid	17
Epistaxis	3

Confinement Results and Particulars Relating Thereto:—

No. of deliveries	490
Of these—	
Twins	8
Premature	23
Induced	10
Forceps	51
Caesarean	2
Breech	21
Still-born	18
Ante-partum haemorrhage	11
Post-partum haemorrhage	4
Mania	1
Abortion	2

Foetal Abnormalities:—

Malformed back	1
Hypospadias	2
Inguinal hernia	1
Hare-lip and cleft palate	1
Double talipes	1
Spina bifida and double talipes	1
Talipes	1
Hydrocephalus	1
Deformed ankle	1
Deformed hands and feet	1

The following table gives the details of confinements of women who had attended the Ante-natal Department, but in whom the child failed to survive:—

No.	Age	Para.	Visits	Details of Confinements.	Ante-natal and Previous History.
1	33	5	7	Baby born on district before midwife's arrival. Macerated hydrocephalic. The placenta was adherent to the uterus.	The mother's blood-pressure on the last two visits was 170 and 165 respectively. On each of these occasions also there was albumen in the urine. Eight days before delivery the foetal heart was faintly heard; three days later, not heard at all.
2	25	3	5	Born on district with doctor in attendance. Ante-partum haemorrhage and unreduced occipito-posterior presentation.	Mother was well all through pregnancy. 1st confinement instrumental, followed by puerperal pyrexia and removal of mother to Gorse Hill. 2nd followed by puerperal pyrexia.
3	39	5	6	Born in the Maternity Home. Normal confinement. Unhealthy placenta. Macerated anencephalic foetus. Mother had some pyrexia.	Mother had a cold during pregnancy, otherwise well. One week before delivery had coloured discharge which ceased on resting. Had had two breech deliveries, one baby having spina bifida; one instrumental delivery, and one normal. One abortion took place four years previous to present confinement and was followed by sepsis.

No.	Age	Para.	Visits	Details of Confinements.	Ante-natal and Previous History.
4	31	1	3	Membranes ruptured before admission to the Home. Presenting part high and position undiagnosed. Foetal heart heard. Fairly rapid delivery of still-born anencephalic infant. Mother had slight pyrexia.	History of troublesome indigestion and sleeplessness, otherwise nothing of note.
5	24	1	6	Difficult breech delivery in the Maternity Home of hydrocephalic child, with spina bifida.	Healthy mother. Quite well during pregnancy. Foetal heart clearly heard two weeks before delivery.
6	29	1	15	Emergency admittance to the Home from district for antepartum bleeding. Delivery seven days later of dead baby in breech position.	Mother first attended clinic for sterility and visited regularly over a period of seven months. On four occasions had discharge, which twice was blood-stained. Nothing abnormal seen during last two and a half months. Visited Consultant at special clinic on two occasions for diagnosis of presentation. Foetal heart sounds heard four weeks before birth.
7	25	1	9	Normal delivery in the Maternity Home of macerated foetus.	Mother had much constipation and nausea, with some headache and anaemia. 17 days before delivery, no movements felt or heart heard.
8	21	2	6	Normal delivery in the Maternity Home of slightly premature anencephalic foetus.	Mother had some hydramnios. Presentation difficult to determine. Visited Consultant's clinic twice. No foetal movements or heart sounds three weeks before birth. 1st confinement normal. Mother transferred to Gorse Hill with pyrexia, and for treatment of baby's eyes.

No.	Age	Para	Visits	Details of Confinements.	Ante-natal and Previous History.
9	39	12	2	Mother admitted early to the Maternity Home for abdominal pain, tenseness and shock. Labour induced. Evidence of concealed bleeding. Delivered of still-born premature baby.	Some backache and severe varicose veins. Domestic difficulties and poverty. Under-nourished. Previous confinements normal. One premature baby and one abortion.
10	31	1	3	Admitted to the Maternity Home and delivered of a premature macerated foetus, anencephalic and with spina bifida.	Mother had been attending Tuberculosis Clinic for two years. Sputum negative. Referred to Ante-natal Clinic by Tuberculosis Officer. Patient had enlarged thyroid, for which she received treatment. Complained of being very tired. Foetal heart not heard 17 days before birth. Patient admitted to the Home five days before delivery, for abdominal pain. Presentation very indefinite.
11	18	1	4	Delivered in the Maternity Home of premature macerated foetus, with unhealthy and offensive placenta.	Mother had influenza two months before first visit to Ante-natal Clinic. Headache during last visit and foetal heart sounds not heard—six days before delivery. A trace of albumen present in urine. Blood pressure 135.
2	40	1	12	Mother two days in labour. Difficult instrumental delivery of post-mature baby. Foetal heart heard 16 hours before birth. Mother had some pyrexia.	Position and presentation difficult to ascertain. Mother was quite well during pregnancy. A trace of albumen in last specimen of urine at Ante-natal Clinic. Albumen still present on admission to the Home.
13	34	2	8	Delivered in the Maternity Home. Infant not macerated. Evidence of concealed ante-partum bleeding.	Mother had enlarged thyroid and was treated for this. General health always good and was well throughout pregnancy. 1st pregnancy normal. Had had one abortion.

No.	Age	Para.	Visits	Details of Confinements.	Ante-natal and Previous History.
14	28	1	10	Admitted to the Home for version two days before delivery. Membranes ruptured unexpectedly and attempts at version unsuccessful. Tedious labour. Foetal heart clear within an hour and a quarter of delivery. Breech birth.	Breech presentation diagnosed ten days before labour commenced. Visited Consultant's clinic for confirmation. Mother had some sciatica and slight swelling of feet during pregnancy. General health good.
15	25	1	7	Normal delivery in the Maternity Home of macerated foetus, with anencephaly and spina bifida. Premature.	Mother stated both eight days and the day before labour that she felt movements. None felt on examination eight days previously and no heart sounds heard. Confirmed at Consultant's clinic the following day. General health good. No complaints during pregnancy.
16	24	1	5	Delivered in the Maternity Home. Membranes had ruptured the day before.	A healthy mother, well all through pregnancy. Foetal heart clearly heard 17 days before confinement.
17	27	3	11	Difficult delivery in the Maternity Home. Impacted shoulders. Foetus macerated.	Much discomfort and some ill health all through pregnancy. Insomnia and headache, with slight constant albuminuria during the last month. Both other pregnancies and confinements normal.
18	37	5	6	Emergency case, admitted from district into the Home for ante-partum haemorrhage. Delivery by forceps. Foetus macerated.	Mother well all through pregnancy. Foetal heart sounds clear five weeks before delivery. Other pregnancies and confinements normal.

Neo-Natal Deaths in relation to Ante-Natal Work, 1932.

No.	Age	Para.	Visits	Mother's History	Confinement	Infant's History
1	27	3	13	Always healthy. One still-birth at 7 months; one induction at 8 months two years previously. Much nausea and headache during early days of present pregnancy. Trace of albumen in urine once only.	Admitted to Maternity Home 15 days before delivery for examination and induction. The latter not advised at once and mother sent home to return 13 days later when induction by bougies and plugging carried out.	Infant slightly premature. Signs of distress at birth and some cyanosis. No improvement took place and baby died 2 days after.
2	37	1	1	Mother healthy. Attended ante-natal clinic once only, six weeks before confinement. Quite well and nothing abnormal noted. Had booked a private midwife.	Admitted to Maternity Home as an emergency one month before delivery. Much oedema and albuminuria. Induction suggested but refused by patient and husband. Normal delivery. Mother continued poorly with abnormal urine till discharge 17 days later.	Infant about 2 weeks premature. Appeared healthy and fed well till 15 days after birth. Colour then became poor, much saliva and snuffling. Offensive stools. Died on the 16th day.

Neo-Natal Deaths in relation to Ante-Natal Work, 1932.—(Contd.).

No.	Age	Para.	Visits	Mother's History	Confinement	Infant's History
3	41	3	7	No details as to general health. Two normal pregnancies, both deliveries instrumental. Present pregnancy uncertain for some time. Much aching and swelling of legs. Urine normal. Foetal heart not heard on three occasions ; queried at last examination.	Patient admitted for induction 4 days before delivery. Carried out by medicinal and mechanical means. Normal delivery. Stormy convalescence with general fever and cough. Discharged at her own wish five weeks later.	Hydrocephalic infant. Died 10 minutes after birth.
4	24	3	6	Chronic kidney trouble. One premature baby and one still-birth. Eclampsia with the second. Was well during present pregnancy save for backache. No albuminuria. Rise of blood-pressure 4 days before delivery.	Admitted to the Home and started ante-partum bleeding. Normal delivery the following day. Mother discharged as satisfactory on the 14th day.	Infant about 4 weeks premature and weighed 3lbs. 12ozs. Died the following day.
5	36	2	9	Mother said to suffer from some debility. 1st pregnancy normal but child still-born. Wassermann negative. Health good throughout present pregnancy, except for slight headache. Feet swelled a little shortly before confinement. Had albumen in urine on six occasions during the last 6 weeks. Blood pressure varied between 138—155.	Normal delivery in Maternity Home. Unhealthy placenta. Mother's condition not too good. Slight pyrexia and continued albuminuria. Discharged much improved.	Small infant weighing 3lbs. 2½ozs. Under-nourished, but remained well till third day. Went rapidly downhill and died the same day.

Neo-Natal Deaths in relation to Ante-Natal Work, 1932.—(Contd.).

No.	Age	Para.	Visits	Mother's History	Confinement	Infant's History
6	36	2	3	Said to be healthy. Not well during 1st pregnancy 8 years ago and under doctor all the time. Had premature twins, difficulty with placenta and post-partum bleeding. Now has varicose veins and slight vaginal discharge, varying in amount and colour. Is under own doctor. Sent to Consultant's clinic for advice with regard to advisability of booking a bed and coming into Home for rest. Medical Superintendent advised against admission till discharge had been investigated. Before this could be done the patient developed pleurisy.	Ante-partum haemorrnage 11 days after last visit. Delivered normally of a premature baby, on the district.	Infant died the same day.
7	19	1	11	General health good. Subject to headache. Had much indigestion and headache early in this pregnancy, with continued sickness. Had a fall 14 days before delivery. No albuminuria. Admitted to Home 2 days later, for abdominal pain. Not in labour, so discharged.	Normal delivery 8 days later. Mother well.	Baby had spina bifida, double talipes and some facial paralysis. Was artificially fed at mother's request and discharged with mother in satisfactory condition. Died one month after birth.

Neo-Natal Deaths in relation to Ante-Natal Work, 1932 (Contd.)

No.	Age	Para.	Visits	Mother's History	Confinement	Infant's History
8	28	2	5	Mother never very strong. Had rheumatic fever and chorea in childhood. 1st confinement long and difficult, followed by mammary abscess. Had booked a private midwife for this baby, but sent to ante-natal clinic for consideration of admitting to Maternity Home. Suffering from abdominal pain and headache. Referred to Consultant's clinic and attended three times. Admitted after 2nd visit for observation as to presentation and for hydrorrhoea. Returned home after 4 days, and re-admitted in labour 2 days later.	Normal delivery and puerperium.	Infant 4 weeks premature, very cyanosed and both eyelids discoloured. Discharged with mother as satisfactory. Weighed 4lbs. 12ozs. at birth. Died at 1 month of bronchitis and cardiac failure.
	20	1	2	Unmarried mother. Always healthy. Said to have had 1 abortion. Some swelling of feet, and headache.	Admitted to Home with ante-partum bleeding. Delivery normal. Discharged at own request against advice of Medical Superintendent.	Premature feeble infant weighing 3lbs. 9ozs. Frequent attacks of cyanosis. Death 16 days after-birth.

Neo-Natal Deaths in relation to Ante-Natal Work, 1932—(Contd).

No.	Age	Para.	Visits	Mother's History	Confinement	Infant's History
10	37	6	3	Healthy mother. All pregnancies and labours normal.	Delivered on district before arrival of nurse.	Attended Welfare Clinic after birth for discharging eyes. Was in contact with pneumonia at home; developed influenza and broncho - pneumonia. Died 13 days after birth.
11	31	2	3	Always healthy. 1st pregnancy and labour normal 10 years ago. Present health good, and well all through except for indigestion at night.	Normal delivery on district.	Infant about 7 weeks premature. Weighed 5¾lbs. Asphyxia. Lived 8 hours.

REPORT ON MIDWIVES, 1932.

(By Dr. Violet King, Assistant Medical Officer of Health and Inspector of Midwives).

29 midwives signified their intention to practise during the year.

The number of routine visits paid was twenty-eight, while seven special visits were made.

The following forms, other than for medical help, were sent in by midwives:—Two for artificial feeding, in one case the mother was returning to work and in the other a breast abscess developed; two forms for maternal and three for infant deaths, with the corresponding forms for the laying out of the bodies; thirteen notices of infectious conditions were received, and related to the following conditions:—Rise of temperature, septic arms, septic kidney and eclampsia.

Twenty-four forms notifying still-births were sent in.

The number of midwives cases in the town for the year totalled 809, and the number of cases they attended as maternity nurses was 202.

It would be much more satisfactory if all nurses who attended a lying-in woman, whether as midwives or maternity nurses, were compelled to notify their intention to practise, so that all of them would come under the supervision of the local authority. The midwives in this town, and doubtless elsewhere, feel very strongly on this matter, and if sufficient representation were made by the local branches of the Midwives' Institute, perhaps something could be done in the matter.

No. of medical help forms sent in:—

For mothers	287
For babies	25
Total	312

Conditions for which Medical Help was sought by Midwives.

Mother.	
Prolonged first stage with early rupture of membranes	1
Prolonged labour	57
Ruptured perineum	143
Uncertain or malpresentation	16
Retained or adherent placenta	5
Excessive loss	2
Ante-partum haemorrhage	17
Post-partum haemorrhage	4
Rise of temperature	5
Poor general condition	2
Poor mental condition	1
Albuminuria	8
Inflamed breasts	2
Threatened abortion	1
Complete abortion	3
Disproportion	3
Small pelvis	1
Induction	1
Eclampsia	2
Persistent vomiting	1
Vomiting and toxaemic symptoms	4
Uterine inertia	2
Obstructed labour	1
Thrombosis	1
Insomnia	1
Cough and pains in shoulder	1
Oedema	2
Vomiting and abdominal pain	2
Chill	1
Shock	1
Anaesthetic for version	1
Maternal and foetal distress	1
Patients' own request	4
Total	297

Child.	
Prematurity	4
Prematurity with dangerous feebleness	3
Abnormalities	4
Abnormalities with dangerous feebleness	1
Dangerous feebleness	4
Still-born	1
Discharging eyes	3
Cyanosis	2
Asphyxia	1
Haematoma	1
Impacted shoulders	1
Total	25

V. REDMAN KING,
Asst. Medical Officer of Health and Inspector of Midwives.

PUERPERAL PYREXIA.

One case of puerperal fever and 55 of pyrexia were notified in the Borough in 1932. Of these, 38 occurred in the Maternity Home, 3 in private nursing homes, 1 in the G.W.R. Hospital and 14 in private houses.

5 of the cases from private houses were removed to the Isolation Hospital.

One case in a private nursing home died, the remaining 55 recovered.

The incidence of puerperal pyrexia appears to be excessively high, owing to the 38 cases registered in the Maternity Home; but of these 38 only five are notifiable under the definition of pyrexia usually adopted in this country. For purposes of comparison with other districts of England and Wales, the number of pyrexias in Swindon in 1932 should be read as 23, not as 56. Also the pyrexia rate and pyrexia mortality rate must be cast on the total births occurring in the borough and not on the births assignable to the borough. The number of live births in the borough in 1932 was 962. The pyrexia rate was therefore 2.39 and the sepsis mortality rate 1.04.

In addition to the 5 cases from Swindon treated in the Isolation Hospital, 4 cases from the outlying County were admitted to that institution. All the Swindon cases recovered, but one of the County cases died.

(One case on our list (No. 21) was not notified and is excluded from the above).

Of the women delivered in the Maternity Home, 362 in number, there were no deaths from sepsis, 38 notifications of pyrexia according to the New South Wales Convention, but only 5 according to the definition of pyrexia usually adopted in this country. The pyrexia rate was therefore 1.38.

A special monograph on the epidemiology of puerperal pyrexia is being prepared and may be published within the course of the year. It is not suitable for inclusion in an annual report. It will suffice here to draw attention to the extraordinary difference in the number of pyrexias notifiable under the usual reading of the Puerperal Pyrexia Order, 1926, and under the New South Wales Convention. There was at one time a certain amount of misunderstanding in regard to the use of the New South Wales Convention in connection with Swindon Maternity Home, but we can answer the critics by stating that during the ten years that there

has been a maternity home in Swindon and the New South Wales Convention has been used, though the numbers of notifications of puerperal pyrexia have been about five times what they would have been had the ordinary convention been used, the fatality from sepsis has been zero and this in spite of the fact that the Home has always catered specially for cases of abnormal and complicated midwifery.

MATERNAL DEATHS.

Two maternal deaths are assignable to Swindon Borough; one a puerperal septicaemia which occurred in a private nursing home; the other, a case of eclampsia admitted moribund into the Maternity Home.

A second case of eclampsia admitted moribund into the Maternity Home is assignable to the County and a case of mania, also assignable to the County, was transferred to Devizes Mental Hospital, where she died.

A case of post-abortion sepsis admitted from the County died in the Isolation Hospital.

No other deaths directly or indirectly connected with reproduction occurred in the borough in 1932. The maternal mortality was therefore 2.25 per 1,000 births.

OPHTHALMIA NEONATORUM.

The number of cases of ophthalmia neonatorum notified in the Borough during 1932 was 5. Of these, one was treated in a private maternity home. No bacteriological examination of this case was made, but it recovered without injury and it is almost certain that it was not of gonorrhoeal causation. The remaining four were treated at the Clinic and recovered completely. One was due to gonococcus*, two to pneumococcus and the fourth was sterile.

45 cases of sore and discharging eyes were notified by midwives. Five of these are the same cases as those notified. Of the others, 25 occurred in the Maternity Home, where notification is enforced rigidly. Of the 25 cases which occurred in the Maternity Home 21 were cured before discharge of the mothers and 4 were transferred to the Clinic and subsequently cured there. None of these cases was gonorrhoeal.

---

* The parents of this child are resident in London, but the mother came to Swindon for her confinement.

Of the 15 cases occurring privately (other than notified cases) 9 were treated at the Clinic. None of these was gonorrhoeal. 6 were treated privately and not examined bacteriologically. All cases recovered completely.

In addition, 9 cases which had not been notified by midwives were treated at the Clinic. None of these was gonorrhoeal and all recovered completely.

The ophthalmia neonatorum service of Swindon is carried out with the precision of epidemiological research and has yielded great profit for an infinitesimal cost. During the fourteen years it has been in operation, not a single case of blindness from ophthalmia neonatorum has occurred in the borough. Epiphora from blocking of the canal has also been eliminated. Recently it has appeared that the minor forms of discharging eyes in infants have a bearing upon puerperal pyrexia.

It will be noted that there was only one case of gonorrhoeal ophthalmia in the new-born and that case was not a native. In 1931 there was no gonorrhoeal case.

Both gonorrhoea and syphilis are rare amongst the married women of Swindon, so consequently gonorrhoeal ophthalmia and congenital syphilis are rare also. Both diseases have been declining since 1924, but in the late Summer of 1932 gonorrhoea of an acute kind occurred in four little girls, in one of which, a child of three, very severe ophthalmia resulting in impairment of one eye, complicated an acute vulvitis. The cases were not directly connected.

OPHTHALMIA NEONATORUM.

Year.	No. Notified.	Cases of Infantile Ophthalmia due to Gonococcus.	Where Treated.				Result.				Not Notified as O.N.
			Home.	Gorse Hill.	Clinic.	Maternity Hospital.	Cured.	Blind.	Injured.	Died.	
*1921	7	?	3	—	4	—	7	—	—	—	19
1922	21	?	2	...	19	...	20	...	1	...	16
1923	34	23	5	4	25	...	30	...	2	2	11
1924	15	13	...	3	10	2	15	...	...	...	12
1925	9	4	1	2	5	1	9	...	...	...	11
1926	8	3	...	...	8	...	8	...	...	..	22
1927	11	5	1	3	6	1	11	...	...	...	15
1928	4	4	...	2	2	...	4	...	...	...	30
1929	3	2	...	1	2	...	2	...	1	...	28
1930	11	8	1	4	6	...	11	...	...	...	58
1931	4	...	...	1	2	1	4	...	...	...	55
1932	5	1	1	...	4	...	5	...	...	...	49

*These figures are incomplete.

Table showing number of cases of Ophthalmia Neonatorum notified, the number treated, the results of treatment, and the number of deaths occurring. 1932.

No of Cases notified	5	No. of Cases	Vision Unimpaired	Vision Impaired	Total Blindness	Deaths
Treated at Clinic		4	4	...	...	...
Treated at Gorse Hill Clinic		...	...	...	...	...
Treated at Maternity Hospital		...	...	...	...	...
Treated privately		1	1	...	...	...
TOTALS		5	5	...	...	...

PEMPHIGUS NEONATORUM.

Two cases occurred, both were treated at the Clinic and recovered. They were not connected.

Table Showing the Number of Visits Paid by the Health Visitors to Mothers and Children and to cases of Tuberculosis.

	1928	1929	1930	1931	1932
No. of first visits paid to mothers and children	874	884	975	910	896
No. of revisits	3731	4765	4240	4250	4445
No. of visits paid to expectant mothers ...	220	330	260	294	299
No. of visits paid to cases of deaths and still-births	89	110	109	95	103
No. of visits to cases of Tuberculosis ...	145	127	161	168	105
No. of visits paid to children aged 1—5 years	4048	5570	5419	5497	5686
	9107	11786	11164	11214	11534

Record of Work done at the Infant Welfare Centres during the Years 1928–1932 inclusive.

	1928	1929	1930	1931	1932
No. of separate Infants who attended the Centre at—					
Eastcott Hill	1242	1247	1278	1303	1310
Gorse Hill	316	263	245	244	267
Rodbourne	260	261	233	253	230
Pinehurst*	...	66	139	145	159
TOTAL	1818	1837	1895	1945	1966
Number of Attendances—					
Eastcott Hill	6281	6649	8232	8488	8048
Gorse Hill	2185	1917	2098	1774	1869
Rodbourne	2115	2282	2156	2258	2118
Pinehurst	...	309	920	929	1108
TOTAL	10581	11157	13406	13449	13143
Number of cases which received medical advice and treatment	942	939	1050	1049	1020
Total Consultations	2505	2636	3567	3445	3169

*Opened 15th July, 1929.

Summary of Conditions Seen and Treated at the Infant Welfare Clinics during the Year 1932.

	Infants.	Toddlers.	Total.
Disease and Defects due to Ante-Natal Causes—			
Phimosis	114	3	117
Congenital defects of nervous system ..	9	5	14
Squint	5	14	19
Congenital diseases of the blood ..	1	—	1
Other congenital deformities & defects	51	2	53
	180	24	204
Specific Infections—			
Congenital syphilis	5	2	7
Gonorrhœa other than O.N. ..	—	1	1
Ophthalmia neonatorum	28	—	28
Pemphigus neonatorum	2	—	2
Tuberculosis	—	1	1
Diphtheria, scarlet fever, measles, whooping cough	12	5	17
Pneumonia	15	1	16
Rheumatism	—	—	—
Nervous system	2	1	3
Various infections	90	39	129
	154	50	204
Deficiency States—			
Ill-feeding	213	13	226
Scurvy	4	—	4
Rickets	27	3	30
Anaphylaxis	4	1	5
Asthma	1	2	3
Skin	45	5	50
Teeth	16	55	71
Tonsils and Adenoids	3	8	11
Various	1	4	5
	314	91	405
Injuries	25	13	38
Miscellaneous	149	20	169
	822	198	1020
No. of Operations for the removal of Tonsils & Adenoids ..	—	3	3
No. of Bacteriological examinations	47	5	52
No. of Haematological examinations	10	8	18
No. of X-Rays examinations ..	4	5	9
No. of Mental Defectives ..	6	3	9
No. of Physical Defectives ..	—	—	—
No. of Blind Children	—	—	—
No. of Deaf Children	—	—	—
No. of Mute Children	—	—	—

Table Showing the Number of Infants and Toddlers referred to Special Departments for Treatment during 1932.

	Infants	Toddlers	Total.
Dental Clinic	16	375	391
Eye Clinic	7	8	15
V.D. Clinic	9	1	10
Orthopaedic Clinic	11	4	15
Throat, Nose and Ear Clinic ..	1	8	9
Electrical Clinic	13	2	15
Tuberculosis Clinic	—	—	—
Rheumatic Clinic	—	—	—
Total	57	398	455

THE MILK (MOTHERS AND CHILDREN) ORDER.

	1928	1929	1930	1931	1932
No. of applications granted ...	72	71	100	158	270
Total quantity of Milk issued (Galls) ...	1186	1572	2195	3069	7025
Total Cost £ (approx.)	100	150	200	270	635

INFANTILE MORTALITY.

The deaths of all persons under the age of 25 which occur in Swindon, and of all Swindon children who die away from the town, are investigated. Some knowledge of the previous history of these children is in the possession of the Health Office and, in an increasing number, the full life histories are available. Since some children die in the institutions of Swindon who do not belong to the town, and certain other children who have regularly attended the Swindon clinics die elsewhere, these investigations become somewhat complicated. In the review which follows, cognizance is only taken of those deaths which the Registrar General accredits to Swindon.

STILL-BIRTHS.

41 still-births occurred in Swindon during 1932, of which 5 were not Borough cases, so 36 are accredited to Swindon, against 33 in 1931 and 42 in 1930. 22 of the Swindon cases and 4 of the outside cases occurred in the Maternity Home and 5 of the Borough cases occurred in connection with the Extern Department. An analysis of these cases will be found in the section of the report dealing with the Maternity Home. The 9 cases which occurred elsewhere are not worthy of analysis, as the information in connection with them is not sufficiently reliable for scientific purposes.

Of the 36 cases attributable to Swindon, 2 were illegitimate pregnancies.

18 of the mothers had attended the Ante-natal Department.

DEATHS BEFORE THE END OF THE FIRST DAY.

9 such deaths occurred, against 14 for last year. 5 were males and 4 females. All were legitimate. 1 was a first pregnancy, 2 second, 3 third, 2 later and 1 unknown.

1 died of hydrocephalus, 1 of cerebral haemorrhage. There is no satisfactory explanation of the other seven deaths, though in one the mother had pleurisy and in another the mother had ante-partum bleeding.

5 of the mothers had attended the Ante-natal Department and two others are known to have had medical supervision during pregnancy.

DEATHS BETWEEN THE END OF THE FIRST DAY AND THE END OF THE FIRST WEEK.

8 such deaths occurred, against 11 for last year. 5 were males and 3 females. All were legitimate. 3 were first, 1 second,

2 third and 2 later pregnancies.

1 died of congenital heart disease (autopsy), 1 of atresia of the oesophagus, 1 of atresia of the bile duct. In the other five no satisfactory reason for death is known, but one of the mothers had toxaemia. 2 of the mothers had attended the Ante-natal Clinic and one had received medical supervision otherwise.

DEATHS BETWEEN THE END OF THE FIRST WEEK AND THE END OF THE FIRST MONTH.

11 such deaths occurred, against 8 for last year. 6 were males and 5 females. Two were illegitimate. 7 were first pregnancies and the others subsequent pregnancies.

3 had attended the Infant Welfare Centre. These were all breast fed and died respectively of diphtheria (three weeks old), influenzal pneumonia (two weeks old) and one from no obvious cause.

2 died in the Maternity Home. Both were breast fed. 1 died of hemiplegia (? injury at birth); the other from no certain cause, though the mother had ante-natal bleeding.

6 cases were not known to us. All were breast fed. 1 died of meningeal haemorrhage (injury at birth), 1 of pneumonia, probably influenzal, 1 of jaundice and 3 of undefined causes (all premature).

6 of the mothers had attended the Ante-natal Clinic.

DEATHS BETWEEN THE END OF THE FIRST MONTH AND THE END OF THE FIRST YEAR.

19 such deaths occurred, against 18 for last year. 9 were males and 10 females. All were legitimate. 8 of the cases had attended the Infant Centre and the histories are known. 5 were breast fed and died—1 of pyloric stenosis*, 4 of broncho pneumonia (2 measles, 2 influenza). 1 was supplementary fed and died of overfeeding. 2 were artificially fed and died—1 of illfeeding, 1 of spina bifida*.

Of the 11 cases who were not known at the Clinic, 3 were breast fed and all died of broncho pneumonia (causes doubtful). 8 were artificially fed and died—1 of tuberculous meningitis, 1 of meningocele*, 1 of purpura (? disease), 2 of illfeeding, 1 of influenzal pneumonia, 1 of lobar pneumonia and 1 of influenza.

DEATHS BETWEEN THE FIRST AND SECOND YEAR.

10 such deaths occurred, against 5 for last year. 6 were males and 4 females. 7 had attended the Clinic and their histories

are known. 4 had been fully breast fed and died—1 of mastoid disease following measles, 1 of influenza, 1 of measles (congenital asthmatic)*, 1 of broncho pneumonia (almost for certain measles). 3 had been partially breast fed and died—1 of tuberculous peritonitis, 1 of measles pneumonia and 1 of spina bifida*.

Of the 3 whose histories are not known to us, 2 were breast fed and died of broncho pneumonia (both probably measles). 1 was partly breast fed and died of measles.

DEATHS BETWEEN THE SECOND AND THE FIFTH YEAR.

15 such deaths occurred, against 9 last year. 9 were males and 6 females. 11 had attended the Clinic. Of these, 6 had been fully breast fed and died—2 of diphtheria, 1 of "meningitis" (probably measles encephalitis), 1 of pneumonia (a mentally defective†), 1 of peritonitis (pneumococcal) and 1 of broncho pneumonia of uncertain causation. Of the 5 who had not been fully breast fed, 1 died of pneumococcal peritonitis, 1 of diphtheria, 1 of rickets, 1 of brachycephalic paralysis, 1 of "persistent vomiting since birth" (probably stenosis)*.

Of the 4 who had not attended the Clinic, 1 was fully breast fed and died of diphtheria. 3 were artificially fed and died—2 of tuberculous meningitis and 1 of appendicitis.

DEATHS BETWEEN THE FIFTH AND THE TENTH YEAR.

11 such cases occurred, against 8 for last year. 5 were males and 6 females. 1 of these children had not attended the Clinic. She died of pneumonia.

Of the 10 whose histories are known, 3 died of diphtheria, 1 of lobar pneumonia, 1 of measles, 1 of tuberculous meningitis, 1 of cerebro-spinal fever (a case of chronic heart disease)*, 1 of acute pneumococcal peritonitis and 2 were killed in road accidents.

DEATHS BETWEEN THE TENTH AND THE SEVENTEENTH YEAR.

There were 6 such deaths, against 11 last year. 3 of these were known to us and died—1 of septicaemia resulting from an accident, 1 of influenzal pneumonia and 1 of cerebral tumour. Of the 3 whose histories are not known, 1 died of purpura, 1 of pneumonia and 1 was drowned.

DEATHS BETWEEN THE SEVENTEENTH AND THE TWENTIETH YEAR.

5 such deaths occurred, against 7 last year. 3 of these were known and died—1 of miliary tuberculosis, 1 of influenzal pneumonia and 1 was drowned. 2 were not known, 1 died of influenza and 1 of malignant ovarian cyst.

DEATHS BETWEEN THE TWENTIETH AND THE TWENTY-FIFTH YEAR.

We are now in a position to include in our scrutiny deaths up to the age of 25, as in a considerable number of cases the life histories of the deceased are known to us. It will, of course, be some time before we shall have full histories of the cases, but owing to the extreme importance of unravelling the fatality of adolescents, particularly in connection with the increasing incidence of pulmonary tuberculosis in adolescent girls, it is felt that this work cannot be started too soon. There is a factitious difficulty in that in this country a woman on marriage surrenders her maiden name and as on the death certificate her married name only appears, it is only in somewhat exceptional cases that it is possible to connect up the death of a married woman with her history during childhood. In connection with such deaths as may occur in connection with reproduction, we have surmounted this difficulty by obtaining from the women themselves their maiden names and registering them on the maternity forms, but this has not yet been done in connection with cases of pulmonary tuberculosis. As it is alleged on very fair evidence that adolescent tuberculosis is much more frequent amongst unmarried than married young women, the possibility that the cause of the proved increase in pulmonary tuberculosis amongst young women may be found in the difference in the internal and external environmental factors of the married and unmarried makes it of paramount importance to obtain information of the past histories of all those who are afflicted.

There were 13 deaths between the ages of 20 and 25, 10 males and 3 females. In 8 of these the histories are known to us. 2 died of motor accidents, one of whom had slight impairment of hearing, the other was normal. 2 were drowned, one of whom was myopic, the other was an old adenoids case with hyperthyroidism. 1 died of appendicitis. 1 died of pneumococcal meningitis complicating empyema; he had an old chronic ear disease of twelve years standing. 1 died of tuberculous peritonitis and 1 of pulmonary tuberculosis. In neither of these cases was there any history during their childhood suggesting special liability to tubercle, nor were they contact cases.

In 5 we have no history. 1 died of disseminated sclerosis, 3 of pulmonary tuberculosis and 1 of cerebral abscess.

Cases marked * were physically, and † were mentally defectives.

Table Showing the Causes of Deaths of Children under 25 years of age in the Borough of Swindon during the Year 1932.

Cause.	0-1	1-2	2-5	5-10	10-17	17-20	Total under 20	20 25
Congenital, Ante-natal and Natal Defects and Injuries:								
Intercranial Injuries	3	—	—	—	—	—	3	—
Abnormal Labour (Asphyxia) ...	—	—	—	—	—	—	—	—
Non-viable Monsters	1	—	—	—	—	—	1	—
Congenital Defects	6	1	1	—	—	—	8	—
Congenital Syphilis	—	—	—	—	—	—	—	—
Jaundice	1	—	—	—	—	—	1	—
Purpura	1	—	—	—	—	—	1	—
Unknown	17	—	—	—	—	—	17	—
Post natal Diseases:								
Measles	2	7	1	1	—	—	11	—
Influenza	6	1	—	—	1	2	10	—
Pneumonia	4	—	4*	3†	1	—	12	1
Diphtheria	1	—	4	3	—	—	8	—
Rheumatic Infection & Sequelae	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis ...	—	—	—	—	—	1	1	4
Tuberculous Meningitis ...	1	—	2	1	—	—	4	—
Other Tuberculous Diseases ...	—	1	—	—	—	—	1	1
Meningitis following Ear Disease	—	—	—	—	—	—	—	—
Cerebro-spinal Meningitis ...	—	—	—	1	—	—	1	—
Bronchitis	—	—	—	—	—	—	—	—
Cerebral Tumour	—	—	—	—	1	—	1	—
Cerebral Abscess	—	—	—	—	—	—	—	1
Appendicitis	—	—	1	—	—	—	1	1
Rickets	—	—	1	—	—	—	1	—
Brachycephalic Paralysis ...	—	—	1	—	—	—	1	—
Ovarian Cyst	—	—	—	—	—	1	1	—
Disseminated Sclerosis ...	—	—	—	—	—	—	—	1
Purpura	—	—	—	—	1	—	1	—
Illfeeding	4	—	—	—	—	—	4	—
Street Accidents	—	—	—	2	—	—	2	2
Drowned	—	—	—	—	1	1	2	2
Other Accidents	—	—	—	—	1	—	1	—
Totals	47	10	15	11	6	5	94	13

* Including 2 cases of pneumococcal peritonitis

† Including 1 case of pneumococcal peritonitis

NOTE —The death of every child under the age of 25 years is made the subject of inquiry, in which all matters connected with the medical history of the child are considered, and from the available evidence the conclusion is drawn as to what was the main factor which destroyed life. In the above table the deaths are given in accordance with these findings. They agree in number, but not in causes of death, with the official records

Infection and Epidemiology.

EPIDEMIOLOGY.

The epidemiology of temperate climates is dominated by two classes of obligatory human parasites, the haemolytic streptococci and the pneumococci. It seems clear that between these parasites and their symbiotic host, which is man, there is an incessant warfare which waxes and wanes periodically, due to factors which are at present ill-understood. No community is ever free from either pneumococci or haemolytic streptococci, but at times both seem to be low in their activity; at other times both are highly active together, but more generally one or the other dominates the situation and becomes the ruling agent in the health of the community. Attention may be drawn here to No. 58 of the Reports on Public Health and Medical Subjects issued by the Ministry of Health. This is a study of the bacterial flora of the nasopharynx of a group of Manchester people during the period July, 1925, to September, 1927. This work was conducted under the direction of Professor W. W. C. Topley and revealed one of the most important facts in epidemiology, namely, that the presence of pneumococci and haemolytic streptococci in the throats of the population at large varies enormously from time to time. Unfortunately this investigation was not pursued as it deserved to be, so we cannot be quite certain whether the results of the investigation are merely accidental, or whether they reveal a biological phenomenon of the most profound importance.*

Those who study epidemiology in the field, who survey the variation of parasitic disease in communities, are well aware of the variations in streptococcal and pneumococcal disease which would be a logical expectation from the Manchester investigation. Both the pneumococci and the haemolytic streptococci give rise to diseases which are well recognized as being reactions to these organisms, such as pneumonia due to the former and scarlet fever, erysipelas and tonsillitis due to the latter, but they produce also a large number of less definite reactions and very often complicate reactions to other parasites, or terminate chronic disease. Their relationship with man is therefore better studied in the bulk than in individual cases and where this is done a biological phenomenon can be made manifest which would almost justify one in presuming the findings of the Manchester investigation, or, those having been established, will explain, in great part, the periodic variation in human sickness.

---

* Since this was written, the formidable volume of the Annals of the Pickett-Thompson Laboratory on The Common Cold has been published. This in general endorses the above statements.

At the end of 1931 the epidemiological situation of Swindon was as follows:—There was an epidemic of measles, not severe and declining; an epidemic of influenza, temporarily abating, but with evidence that it would increase in severity; an epidemic of diphtheria, which had started some fifteen months earlier and whose future progress could be foretold with fair accuracy. In an appendix on the incidence of diphtheria in the 1931 report, the expected progress of this disease during the year 1932 was foretold and it will be seen later that the disease behaved very much as it was expected to do. The year 1931 had been almost free from diseases of streptococcal origin and there was at the end of the year no evidence of activity of these organisms.

The condition of the town in January caused considerable anxiety. Diphtheria was endemic, giving rise to small local outbreaks. It was not difficult to foretell where these outbreaks were likely to occur, nor the actual numbers which were to be expected in each outbreak, but their severity could not be foretold and generally throughout the year the severity was high. Measles remained epidemic in January; the type generally was mild, but directly or indirectly it caused 11 deaths. Influenza was epidemic, moderately severe in type. This epidemic had been foretold in the middle of June, 1931, and it was of some interest to watch whether the actuality corresponded with the expectation. The correspondence was fairly close, though the actuality was less severe than the expectation.

Towards the middle of February matters became quiet. Measles declined rapidly. Diphtheria declined, though as regards that disease the position was not much altered. Influenza declined. For the first time for about fifteen months the suspicion arose that the haemolytic streptococci were getting active. In the middle of March matters were quiet, though there were indications of a deterioration in nutrition amongst the children.

About the middle of April things began to deteriorate again. Diphtheria became slightly more active, with two important localized outbreaks, but the virulence was comparatively low. There was still some influenza in the town and this produced a somewhat high prevalence of puerperal pyrexias of no particular consequence. At this time started a high prevalence of enlarged glands in children, which increased the belief that the streptococcus was about to become more active.

In the middle of May matters gave cause for considerable anxiety. Diphtheria still remained active and cases of measles began to crop up which made us fear an epidemic in June. We have a note on the 17th May that "a high incidence of measles with a comparatively high fatality is expected during the next six

weeks." It may be stated at once that this did not materialize. An increase in the pneumonia rate at the end of May was of doubtful significance. Far more important was the increase in severity of the puerperal pyrexias.

Things got worse and in the middle of June the epidemiological situation had become extremely complicated. The expected measles epidemic turned out to be a mild affair, though there were a fair number of ear complications. Glandular enlargements were getting steadily more frequent and a few cases of scarlet fever, of a more severe type than we have seen for several years, occurred towards the middle of June. On the 14th June the whole condition of the Borough was considered and an attempt made, in the light of all the evidence in our possession, to forecast what was likely to happen in the immediate future and what steps could be taken to safeguard the health of the citizens. The conclusion reached was that a period was approaching in which the haemolytic streptococci were going to play a formidable part. For various reasons it was thought that scarlet fever would not become epidemic in the town, certainly before the end of the Autumn and probably not until 1933, but that more serious troubles were to be expected. This forecast appeared to be very near the mark and kept us very busy during the Summer months.

About six weeks later, i.e. towards the end of August, the position was as follows:—Diphtheria had temporarily abated. The streptococcal diseases, however, had increased somewhat formidably and showed signs of increasing virulence. At that time the haemolytic streptococci were causing an unusually large number of suppurating glands, empyema, acute appendicitis and puerperal pyrexia and a few cases of scarlet fever of moderate to high severity, but we were still of the belief that scarlet fever would not become epidemic until the end of the year. There was a moderate incidence of pneumonia, mainly of the June epidemic type. We have a note on the 23rd August to say that "the future outlook so far as pneumococcal disease is concerned is good and there is no evidence to suggest an approaching wave of influenza in the ensuing Autumn or Winter." There was in August a minor outbreak of food poisoning, limited to one family, caused by Bacterium Aertrycke. Another matter which caused anxiety was a sudden increase in virulence both of gonorrhoea and syphilis, known to us mainly through cases occurring in children. For some reason, of which we are ignorant, congenital syphilis became of enhanced virulence in the late Summer of 1932. It is not that many new cases were discovered, but that known cases which had been long quiescent and doing well, suddenly started to do badly. This was particularly manifested in interstitial keratitis. The gonococcus also became active amongst children and at one time we had four young girls with

acquired gonorrhoea of a most virulent description, one of which developed gonorrhoeal ophthalmia. These cases were, so far as we know, quite unconnected with each other.

The next review of the health conditions of the town was on the 20th September when matters had, if anything, got worse. Haemolytic streptococci were now becoming distinctly unpleasant and the gravest anxiety was felt in connection with the materity service. We had one case of puerperal septicaemia which ended fatally and three others in which the outlook was grave, but which eventually recovered. Fortunately, though we were much troubled with puerperal pyrexias of a minor character in the Maternity Home, we managed to escape visitation by the more dangerous forms of puerperal disease.

In the middle of October matters, though unfavourable, improved somewhat. We were now hoping for an epidemic of scarlet fever, but at the same time rather fearing it lest it might be of the severe character of the few stray cases which had occurred in the earlier part of the year. It is our experience that nothing has a more favourable influence upon the health of a town than an epidemic of scarlet fever of the type that has been prevalent in recent years, as this seems to give some immunity to the general population against the more dangerous forms of disease spread by the haemolytic streptococci.

After the end of October things definitely improved, except for diphtheria. This improvement was continued into December, which, with the exception of diphtheria, was a comparatively good month. There was a slight increase in scarlet fever cases, though nothing to suggest an immediate epidemic. There was no evidence of influenza at all. The year ended favourably, though diphtheria still continued endemic throughout the Borough and was giving rise to local outbreaks. The outbreaks, however, were becoming smaller in extent, though unfortunately were still of high virulence. There was no influenza in the Borough at the end of the year, nor was there any indication of its approach.

DIPHTHERIA.

Worked out over a ten year period, diphtheria can be expected to produce 100 notifications and 5 deaths per 1,000 births. In Swindon during the last ten year period diphtheria was very low in the early part, so that it was expected that its incidence and mortality would rise, which it did in 1930. The average expectation for Swindon is roughly 80 notifications, with 4 deaths, per annum, but as we were due for a big year to bring up the ten year average, something very much more than the average toll was anticipated. The maximum theoretical expectation for 1932 was 400 notifications and 9 deaths. Actually there were 199 noti-

fications and 9 deaths. This is the highest incidence of diphtheria ever recorded in the Borough and one asks whether the recent epidemic wave of diphtheria has sufficiently immunized the population to promise a period of comparative freedom.

A little, but now steadily increasing, amount of artificial immunization is done in the Borough, but up to the present this has not been sufficient to influence the symbiotic situation. It is now generally agreed amongst epidemiologists that the means taken in the past to control diphtheria had done nothing except shift about its age incidence and they do precious little even for this, the main explanation of the shift in age incidence of diphtheria being the decreasing toddler density due to the declining birth rate. There is, as a matter of fact, little gained by shifting the age incidence of diphtheria, for its fatality is not much influenced by age. In this way it differs from measles and, in fact, from all the infections in which the reaction falls on the respiratory apparatus. The safety or otherwise of a community from diphtheria depends solely upon the state of communal immunity. This can be raised only by the disease itself, for the immunity to diphtheria is special and has no relationship whatever with any other factor of the internal or external environment. This immunity can be produced artificially without any danger, but if it is not, it must be produced naturally by a symbiotic process which is extremely dangerous. Man cannot escape diphtheria and though small communities may keep free from it for long periods, they are eventually caught and pay just the same toll as those places where the disease is constantly present. The important work of Dr. Graham Forbes on the incidence of diphtheria should put these matters at rest and guard us from beliefs and practices which, though they are very imposing and venerable, are totally false. The case can now be put perfectly clearly. We can escape diphtheria by artificial immunization. If we do not escape this way the liability to the disease is 100 attacks and 5 deaths per 1,000 born and it makes practically no difference where we live or how we live.

The age incidence of diphtheria in Swindon in 1932 was that which is now most frequent. Of 199 cases, 124 occurred within the school age 5—15. Of the 9 deaths, 2 occurred during the school age, 1 in a man of 21, 1 in an infant of three weeks and 5 in the under fives. It is the custom in Swindon to swab the throats of all contacts with cases of diphtheria. In 1932, 811 contacts were swabbed, of which 69 were positive.

SCARLET FEVER AND OTHER DISEASES CAUSED BY HAEMOLYTIC STREPTOCOCCI.

There were 47 cases of scarlet fever notified in the Borough during 1932, of which 46 were admitted to hospital and in 5 the

diagnosis was not confirmed. There were no deaths from the disease, though the cases were very distinctly more severe than those we have met with in recent years. Scarlet fever is expected to become epidemic in the Borough early in 1933. It was feared that this epidemic might have started late in 1932 and hoped that it would not start before the end of February, 1933. The reason why an earlier start was feared was that the diseases caused by haemolytic streptococci in 1932 were severe and such scarlet as we did get was also severe, many of the cases being of the septic variety, so that it was not unreasonable to expect that an epidemic starting in such an environment might be something very different from the trivial disease which scarlet fever has been in epidemics in the present century.

There were 17 cases of erysipelas with one death, but other diseases connected with streptococci were numerous and fatal. There was a very severe epidemic of streptococcal sore throat in the Autumn.

THE PNEUMONIAS.

There were 182 cases of the pneumonias notified, which is the largest number since 1928. 44 deaths occurred from the disease, giving a fatality rate of 24%. 53 cases were treated in the Isolation Hospital with 9 deaths, giving a fatality rate of 17% and 129 were treated at home with 35 deaths, giving a fatality rate of 27%.

THE PNEUMONIAS.

The statistics for Pneumonia for the past twelve years are as follows:—

Year.	Total No. of cases notified.	Total No. of deaths.	Cases removed to Hospital.			Cases treated at Home.		
			No	Deaths.	Death Rate.	No.	Deaths.	Death Rate.
1921	36	19	...	...	...	36	19	52
1922	156	43	1	0	0	155	43	27
1923	68	28	12	0	0	56	28	50
1924	175	62	31	5	16	144	57	46
1925	204	61	50	10	20	154	51	33
1926	172	52	27	6	22	145	46	32
1927	202	58	63	14	22	139	44	31
1928	204	53	66	16	24	138	37	27
1929	176	54	52	11	21	124	43	34
1930	105	40	44	12	27	61	28	46
1931	143	37	50	8	16	93	29	31
1932	182	44	53	9	17	129	35	27
12 years.	1823	551	449	91	20.3	1374	460	33.5

THE INFECTIONS DUE TO PARASITES BELONGING TO THE GENUS *BACTERIUM*.

These are the abdominal infections, apart from appendicitis. With the exception of a small outbreak of food poisoning caused by Bacterium Aertrycke, affecting three persons in one household, Swindon was free from diseases caused by parasites of the Genus *Bacterium* for the fourth year in succession.

THE VIRUS DISEASES.

With the exception of chickenpox, which is no longer notifiable, there were no virus diseases in Swindon in 1932. One fatal case was notified as encephalitis lethargica, but the diagnosis was withdrawn and the more probable one of encephalitis due to influenza was substituted. There was no polio-myelitis. There was one fatal case of cerebro-spinal fever.

THE NON-NOTIFIABLE INFECTIOUS DISEASES.

Measles was fairly prevalent in the early part of the year and caused 11 deaths. Whooping cough was mildly prevalent at various times, but caused no deaths.

There was an epidemic of influenza in the late Winter which caused 10 deaths in people under the age of 25 and just after Christmas, 1932, there was a considerable wave of indefinite pyrexias which were considered, possibly correctly, to be influenza, but they were without fatality.

Rubella was present in the middle of the year and mumps was highly prevalent towards the end.

TUBERCULOSIS.

The most notable feature in the tuberculosis returns for 1932 is the high incidence of pulmonary tuberculosis amongst females aged 25—35. Out of 35 notifications of female pulmonary tuberculosis, 17 occurred in this age period, whereas in the males, of 27 notifications only 6 occurred in the age period 25—35. Of the 15 deaths from female pulmonary tuberculosis, 7 occurred between the ages of 25 and 35, and of the 26 male deaths 9 occurred in the same age period.

Viewing the tuberculosis situation as a whole and comparing it with past ages, one can say that whereas the problem of tuberculosis in infancy and childhood is becoming less and less insistant

and senile tuberculosis becoming much less frequent and much less fatal, the problem of adolescent tuberculosis remains stationary, so that at the present time pulmonary tuberculosis in adolescence and early adult life, particularly in females, stands out as the major problem of the disease. Much attention has been given to this matter during the past few years, but there is no general agreement why adolescent females should suffer so severely. We do know that these girls who fall victims to pulmonary tuberculosis never show any indication of the disease during their school life and where we are able to follow back the life histories of those who fall out we have not, so far, found that they had been particularly exposed to infection, or that during the years that they were under observation from the Health Department they showed any sign or symptom that they were about to fail. Unfortunately we rarely know anything of these people between the time that they are passed in the final school inspection and that when they are notified by the Tuberculosis Officer. Something happens after they leave school of which we are totally ignorant.

No action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, as no cause for action occurred, and no action was taken under the Public Health Act, 1925, Section 62.

VACCINATION.

No vaccinations or revaccinations were done by the Public Health Department during 1932.

CANCER.

101 deaths from cancer, 46 males and 55 females, were registered in the Borough during 1932, against 98, 97 and 91 in the three previous years. The cancer death rate would appear to have become stabilized at, unfortunately, the very high figure of 155 or thereabouts. This, of course, is a crude rate. Cancer is markedly age-linked and, therefore, crude rates tell us very little of its trend. The crude death rate for cancer varies enormously in different parts of the world, from 9 per 100,000 population in Ceylon and Korea, to 166 in Switzerland and 170 in California. Standardized rates are only obtainable for certain countries. In England a standardized rate means a rate standardized for the age distribution of the population. The standard year is 1901 and the crude rate is standardized to what it would have been had the age of the population remained constant as it was in 1901. Owing to the tremendous fall in the birth rate during the present century, the age distribution of the population now is widely different from what it was in 1901, so standardized

rates differ markedly from crude rates.

In 1931 the crude cancer rate for England and Wales was 1,484 per million population, but this on standardization sinks to 1,009. For females the crude rate in 1901 was 985 and in 1931 it was 1,516, so that the crude rate shows an increase of cancer of 50 per cent.; but the standardized rate in 1901 was 944 and in 1931 it was 987, which shows an increase of roughly 4 per cent. only. There are, however, other factors besides age which influence cancer incidence and if these are taken into consideration it is probable that the fully standardized cancer death rate to-day is rather less than it was at the beginning of the century.

There is a popular idea that we know little or nothing of the causal factors of cancer, but, as a matter of fact, our knowledge is considerable and is increasing with great rapidity, but the known facts cannot yet be co-ordinated. The outstanding factor in our knowledge is that cancer is connected with reproduction. For this reason there should be—and in fact there is—a marked difference in incidence of cancer between highly fertile and lowly fertile races and classes and this of itself has probably had considerable influence in the rapid rise of the crude cancer incidence in Western races during the present century. Since cancer is not a notifiable disease, the only reliable statistics that we have relate to deaths from the disease, but as cancer is not invariably fatal and the disease in some sites is comparatively easily curable in the clincal sense, whereas in others it is not, cancer deaths do not correspond with cancer incidence. There has been no lack of research into the problems of cancer, but a great deal of it has been along lines dictated by policy rather than by science, so from it nothing of any importance could be expected. Yet there has been much genuine scientific research, particularly during the last two or three years, which is not only very promising, but which has delivered a great mass of valuable and trustworthy fact which in course of time physicians may be able to utilize.

DIABETES.

In 1932 there were 5 deaths from diabetes, against 14 for the year before. It is noteworthy that in 1932 all the diabetic deaths were of females. There seems no doubt that diabetes is increasing in frequency, but as we now possess a method of treatment which, though it does nothing to cure the disease, can keep those suffering from it in apparent health almost indefinitely, deaths from diabetes, though they do not diminish in number, are being gradually pushed forward into later age periods.

GENERAL OBSERVATIONS ON MORTALITY STATISTICS.

The mortality of man is exactly 100 per cent., always has been and always will be so far as we can tell, i.e. every one of us dies and dies but once. The Registrar General requires that each of us as he goes out shall be labelled with a certificate giving the cause of his demise. There are, we believe, about 10,000 different causes which the Registrar General will accept, but natural death is not one of them, so though we all die, not a single one of us is allowed officially to die naturally. It follows, therefore, that as certain causes of death tend to diminish or to disappear, others must take their place and, therefore, it is absurd to be alarmed when the Registrar's figures show that certain causes are steadily on the increase, if those causes are such as are naturally to be expected as the result of old age and decrepitude. A rise of the death rate of typhoid fever from .01 to .02 would be just cause for alarm and for action, whereas a rise of the death rate from arterial disease or cerebral haemorrhage from 1,000 to 2,000 should be cause for congratulation; for the former means that more persons are dying young from a preventable disease, whereas the latter means that more persons are living their full course, and dying from diseases which, in spite of the Registrar General, we must consider to be normal terminations.

The average span of life to-day is about 51 years for males and 56 for females. This is an increase of about 10 years per person within the past forty years; put in another way, a child born to-day has the same chance to reach 55 as his grandfather had of reaching 45, but there is no increase in old age. The chance of a man of 50 to-day living to be 70 is slightly less than it was fifty years ago, for the whole saving of life has taken place amongst children. Whereas we have suppressed mortality amongst the young to about one-third of what it was a couple of generations ago, we have not influenced the mortality in the latter half of life.

In the past fifty years the birth rate has fallen to one-half and the death rate has fallen to about two-thirds. In the future, the death rate will not fall, but must increase; what the birth rate will do we cannot say. The average age of man will not be increased to much above the present figure, so that the future of the race is for the population to grow steadily older and die out more rapidly. The population of this country increased, but with decelerating rapidity, up to the beginning of 1933. So far as we can tell at present, this year will show no increase of the population and may possibly show a decrease, but a decrease in future years is inevitable unless there is an enormous increase in the birth rate. Whether it is an advantage for the population to increase or decrease, or whether anything would be lost or

gained by the total extermination of civilized man, are matters of opinion, but it is well to recognize that so far as Nature is concerned, the human population of the Earth is a matter of little consequence. There is no more difficulty in the Earth supporting a population of 40,000 million than in supporting a population of 40,000, for the only thing which is utilized in the maintenance of life is sunlight and this, even in our somewhat sunless country, could be made to support a population of any conceivable magnitude. The recent financial crisis should have brought before all, and has brought before that minute section which ever stops to think, that the material needs of man can be and, in fact, are produced at an infinitely greater rate than he can re-produce himself and that the reason that so many fail to get sufficient to nourish and support them is not shortage, but the manipulations of politicians and financiers. It is not a natural disability which man has to endure, but an artificial product which man himself can remedy.

DUNSTAN BREWER,
Medical Officer of Health.

Public Health Department,
61, Eastcott Hill,
Swindon.

The belated appearance of this report is due entirely to the delay by the Registrar General in furnishing us with the population figure for the middle of the year. This figure, 61,990, was somewhat of a surprise to us. Last year's figure was 62,700 and the natural increase of the population was 163, so had there been no migration the population figure for the middle of 1932 would have been 62,863. The Registrar General, therefore, has estimated that there was a migration balance against us of 873. This population would require about 200 houses to accommodate, so the bearing of this diminished population upon the housing situation will require the serious attention of the local authority.

APPENDIX.

DIPHTHERIA IMMUNIZATION.

(By J. Stevenson Logan, Deputy Medical Officer of Health).

Less public interest was shown in this work during the last year until diphtheria appeared among the children attending Clarence Street School. This resulted in a gratifying demand for immunization and in consequence the figures for this year are better than those for 1931. There are, however, signs that with the disappearance of any obvious immediate danger of infection, interest in this branch of prevention is again waning.

By the end of the year all children who had completed a course of immunizing injections previous to June 1st, 1932, had been re-tested and it is gratifying that all of them were Schick negative.

To meet the demand for quicker protection it was decided to dispense with the preliminary Schick test in children under the age of 7. The only practical disadvantage is that as one is unable to begin with a smaller dose 0.1 c.c. in pseudo positive reactors, the full dose, 1.0 c.c., may provoke a reaction. On 14 cases immunization has been begun without a preliminary Schick test with a complete absence of any reaction. In all, 82 doses of T.A.M. have been given and careful enquiry has failed to discover that any symptom other than a slight transient stiffness in the arm has followed any of them, except in one case when slight sore throat was complained of.

SUMMARY.

No. of new cases attending Clinic	52
No. of primary Schick tests	38
No. of re-Schick tests	18
No. of negative Schick reactions after course ...	18
No. of positive Schick reactions after course ...	0
No. injected without preliminary Schick test ...	14
No. of patients completing course	17
No. in course of immunization	24
Defaulters	4
No. of injections given	82

J. STEVENSON LOGAN,

Deputy Medical Officer of Health.

ISOLATION HOSPITAL, GORSE HILL.

ANNUAL REPORT

From 1st April, 1932, to 31st March, 1933.

ISOLATION HOSPITAL.

The Isolation Hospital year runs from the 1st April to the 31st March, and it is advisable to keep to this year, because, as the Hospital caters for a large area outside the Borough boundary, its report could not be made to fit in entirely with the report for the Borough, whereas, by carrying on the Hospital year three months beyond the end of the calendar year, it is possible to get a better retrospective view of the epidemiology of the last quarter, and a break at the end of March is least disturbing to the history of epidemiology.

The only change in the administration of the Hospital which occurred in the year under review was an agreement with the Wilts County Council to admit into the Hospital for treatment all cases of erysipelas occurring in the district for which hospital accommodation is desirable. This was to relieve other public institutions of the necessity of treating cases of erysipelas, for which purpose they are not fully equipped. Cases of erysipelas always have been admissible into the Hospital, but it had been the custom to limit the admissions to cases which were potentially dangerous to the public and then only if satisfactory accommodation in the Hospital could be reserved for them.

The Hospital at present accepts for treatment persons suffering from any form of notifiable disease, except smallpox and tuberculosis, and also from any infectious condition which is not notifiable, at the discretion of the Medical Superintendent. Also, for administrative reasons, it caters for cases of incomplete abortion, whether these are septic or not.

In July, 1932, the administration of the town ambulance was transferred from Victoria Hospital to the Isolation Hospital. As the Isolation Hospital had always maintained a twenty-four hour ambulance service for infectious cases, the acceptance of the town ambulance work did not introduce any new principle, or necessitate any drastic administrative changes.

BACTERIOLOGICAL DEPARTMENT.

Excluding the bacteriological and pathological work of the Hospital itself, diphtheria swabs from the town and outlying district are cultured and examined at Gorse Hill, as well as at the Health Office in Eastcott Hill. During the year 1932-33 660 swabs were examined on behalf of the Hospital and 786 on behalf of Swindon Borough and the surrounding rural sanitary authorities.

AMBULANCE SERVICE.

When the town ambulance was taken over, the Hospital possessed three ambulances: an up-to-date Morris, in perfect condition and comparatively new, used mainly for infectious cases; the town ambulance, a Ford, in poor condition, used for accident and non-infectious conditions, and a Ford veteran, which had seen service since the days of the War and was used for the conveyance of articles to be disinfected. In the early days of 1933 this last vehicle finally came to rest and has been removed and will, in the course of the next few months, be replaced by a modern up-to-date ambulance. When this has been purchased, that which is now the town ambulance will be degraded to be a reserve and used for the conveyance of articles to be disinfected.

During the year under review, the following journeys were made:—

Transport of infectious cases	400
Transport of non-infectious cases since 11th July, 1932	475
Transport of bedding for disinfection	217

HOSPITAL SERVICE.

The number of new admissions during the year 1st April, 1932, to 31st March, 1933, was 412, against 321 and 330 for the two preceding years. The admissions were above the average in number and, as they were mainly diphtheria, which of recent years has increased considerably in severity, the year was a comparatively heavy one.

On the 1st April, 1932, 29 patients remained under treatment in Hospital, so that altogether 441 cases were under treatment during the year. Of these:—

395 were discharged cured,
1 was sent home as she was not suffering from any acute condition,
1 was transferred to another hospital for abdominal operation,
1 was transferred to Winsley Sanatorium,
20 died, and
23 remained in Hospital on 31-3-33.

The new admissions were received under the following notifications or descriptions:—

Scarlet Fever	83
Diphtheria	242
Pneumonia	41

Puerperal Pyrexia	11
Babies with Mothers	8
Abortion	3
Erysipelas	6
Polio-Myelitis	2
Measles	14
Meningitis	1
Enteric Fever	1

The 441 cases arranged according to their final diagnoses were :—

Scarlet Fever	86
Diphtheria	221
Pneumonia	41
Puerperal Pyrexia	12
Babies with Mothers	8
Abortion	2
Diphtheria and Scarlet Fever	2
Diphtheria and Mumps	2
Scarlet Fever and Mumps	1
Tonsillitis	20
Erysipelas	7
Measles	18
Polio-myelitis	1
Tuberculous Meningitis	1
Influenza	1
Urticaria	4
Rubella	1
Laryngitis	1
Rheumatic Fever	1
Syphilis	1
Congenital Syphilis	1
Appendicitis	1
Asthma	1
Post-pharyngeal Abscess	1
Chronic Constipation	1
Senility	1
No obvious disease	4

The 412 cases admitted during the year were chargeable to the following local authorities :—

Public Health Acts :

Swindon Borough	316
Highworth Rural District	62
Cricklade and Wootton Bassett Rural District ...	26

Maternity and Child Welfare Act (Puerperal Cases) :

Wilts County Council	6
Berks County Council	2

DIPHTHERIA.

There were 221 cases of pure diphtheria, 2 cases admitted with concurrent scarlet fever and 2 with concurrent mumps, making 225 under treatment during the year. This is the highest number of cases of diphtheria treated in the Hospital within recent years. Of these, 9 were bacteriological cases without the specific clinical reaction, 8 were carriers and 1 was a contact. These 18 cases must be excluded from the diphtheria statistics, as they were not suffering from the disease diphtheria. Carriers and contacts are not generally admissible to Hospital. In the town we have no carriers and contacts can be kept under observation without segregation, but for the rural districts, and more particularly for persons who are in public institutions, there is a good reason for removing carriers and contacts to an isolation hospital. All these cases were freed from the corynebacterium before they were discharged, except in two instances, where the organism carried was submitted to biological tests and found avirulent.

It is a remarkable fact of great interest to epidemiology that carriers of virulent corynebacterium do not exist in Swindon and such carriers, or reported carriers, as we admit into Hospital from the rural districts prove readily amenable to quite simple treatment. In large urban districts generally, chronic carriers of virulent corynebacterium are frequent and are generally resistant to any form of treatment to free them. Why there should be this difference between the large towns and the smaller urban and rural districts is not absolutely clear, but its influence upon the behaviour of symbiosis is marked. In the cities, diphtheria is an endemic disease liable to periodic variation in incidence; in the smaller towns and rural districts it is not an endemic disease, but occurs in explosive epidemics at more or less irregular intervals.

Of the 207 cases of true diphtheria, 9 died, giving the extraordinarily low fatality of 4.3% of genune clinical cases. These deaths were as follows:—Every one was admitted later than the fourth day of the disease. One lived 10 days, another 8 days, and a third 7 days; all these died of cardiac paralysis. One was a respiratory case for which tracheotomy was performed and who lived two days. The others were all admitted moribund and died within twenty-four hours. One of these was a respiratory case, one haemorrhagic and one was an imbecile.

The type of the disease generally was severe and the complications were numerous, the chief of which, excluding com-

plications of the 9 cases who died, were as follows:—

Croup	12	(1 was intubated).
Paralysis	16	(plus 2 which developed after discharge from Hospital).
Palatal and Pharyngeal		
Cardiac failure	13	
General paralysis	3	
Ocular paralysis	4	
Herpes	2	
Purpura	1	
Quinsy	3	
Otorrhoea	4	
Angina	1	

Twenty-three developed anti-toxin rashes and four were second attacks. One was a case of diphtheria of the skin of the groin.

The following matters are worthy of comment:—

(1) Of recent years there seems to have been a change in respiratory diphtheria. Cases of membranous laryngitis calling urgently for operation and giving, on the whole, excellent results have become quite uncommon. Most cases of croup are ill for some days before they become alarming and on admission to hospital either clear up under anti-toxin, or else are found at operation to be suffering mainly from membranous tracheitis and bronchitis and are rarely relieved by the operative procedure. So though the outlook for croup has become distinctly more favourable than it was, the fatality of those cases requiring operation is higher than ever. This is to be explained in part, but not entirely, by the better results obtained by anti-toxin, particularly if given intravenously.

(2) One case of diphtheria developed Angina Ludovici, a very rare complication for diphtheria, though in the last generation it was not uncommon in scarlet fever. The bull-neck which is not uncommon in the acute stage of severe diphtheria is not Ludwig's angina. In the account of the epidemiology of the town during 1932 attention is called to the dominance of haemolytic streptococci during a large period of the year. One of the reactions to this was Ludwig's angina, of which there were some five cases complicating various diseases, all but one of which recovered.

(3) It will be noticed that there were four cases of genuine second attacks of diphtheria. The notes on the first attacks in these patients were available.

(4) The case of skin diphtheria recovered without any paralysis. The Author has experience of four cases only of skin

diphtheria, curiously enough all affecting the right groin. The three former cases all died of general paralysis.

(5) One child who had been immunized was admitted as diphtheria on the strength of a positive swab. This child was Schick negative and had no throat reaction, but the organisms present were virulent.

THE PNEUMONIAS.

The 41 cases of pneumonia under treatment during the year were as follows:—

Variety.	Cases.	Recovered	Died.
Croupous type	13	11	2
Influenzal type	4	4	—
June epidemic type	9	9	—
August type pneumonia	1	1	—
Pleuro pneumonic type	4	4	—
Post operative pneumonia	1	1	—
Measles pneumonia	5	3	2
Broncho Pneumonia of uncertain type	4	3	1
TOTALS	41	36	5

The number of cases of pneumonia treated in Hospital was less than usual, but the recovery rate was very favourable. It will be noted that the cases of influenzal pneumonia were but four in number , but they all recovered, and there was one case of the August type, which is a variety of influenzal pneumonia. This case also recovered and is the only case of the kind in the Author's experience which did not end fatally. The pleuro pneumonic group, all of which recovered, contained two who developed empyema. On the unfavourable side was one of the deaths from croupous pneumonia, a man of 42. The organism present here was pneumococcus Type 2. He was treated with serum, but did not respond. Generally speaking, we expect all cases of the croupous and June epidemic types between the ages of 3 and 50 to recover.

The typing of pneumonia which is used by the Author is not recognised yet by the generality of the medical profession and this is one reason why the types are given somewhat fanciful names, but behind this typing there lie many epidemiological factors of great consequence. A more usual method of typing is upon a purely bacteriological basis. This also is used to some extent in Swindon. There is not complete agreement between the bacteriological and the clinical typing, but the June epidemic type, which of recent years has been without fatality, is always found to be due to pneumococcus Type 1 and the croupous type is also found to be due to Type 1, except those cases which end fatally, which, so far, have always been found to be due to Type 2. We have not, however, sufficient experience of bacteriological typing to be of any real value.

From the consideration of the pneumonias which occurred in the Spring and Summer we gave a forecast that influenza would not be troublesome in the Borough during the Winter 1932-33, a forecast which proved to be accurate.

Pneumonia is the most important of all human diseases and not nearly enough attention has been paid to it. In England it occupies about the fourth place in the causes of death, being exceeded only by diseases of the heart, other degenerative diseases and cancer, but it differs from these more common causes of death in that it is an acute disease from which true recovery is possible. It is quite conceivable that pneumonia might be abolished as a cause of death, except as a terminal infection, whereas it is not conceivable that those causes of death which are more frequent will ever have their mortality much reduced. The reasons why the study of pneumonia has been so much neglected seem to be the following :—

(1) The disease is very acute and so does not give much time for exhaustive analysis.

(2) It is protean in character. There is not only tremendous variation in type, but there is great periodical variation in the fatality of every type.

(3) Where pneumonia is dealt with in large quantities, the staff and facilities for critical study are totally inadequate. Where the number of cases dealt with is small, it is impossible to get sufficient of the various types for comparative treatment.

(4) The number of remedies which have been introduced for the treatment of pneumonia run into thousands. With the exception of two, none of these rests on a sound theoretical basis.

PUERPERAL CASES.

There were 12 puerperal cases, one of which died, and 2 abortion cases, both of which recovered.

SCARLET FEVER.

86 cases of scarlet fever, 1 case of scarlet fever and mumps and 2 cases of scarlet fever and diphtheria were treated in the Hospital during the year. Of these cases, 2 were re-admissions, one because it was suspected that she was a spreader and the other because she had developed nephritis. There were no fatalities, nor were there any complications left after discharge from Hospital, except the nephritis, which did not clear up. There is, however, some question whether this nephritis was due to scarlet fever.

The type of the disease was somewhat less benign than it has been of recent years, but this is of little significance as the numbers were small and scarlet fever in the district was in that phase of its periodicity where unusual manifestations of the reaction are most to be expected. 2 of the cases were of the septic variety, 3 developed otorrhoea, 2 nephritis, 2 rheumatism, 2 abscess in the neck and 1 endocarditis. 17 of the cases were treated with anti-toxin.

RETURN CASES.

8 alleged return cases occurred and all were investigated. In one case a boy, suffering from diphtheria, gave rise to a return case in the Borough and to another case outside the Borough. The infector had been a severe case of diphtheria complicated by Angina Ludovici and he had been in Hospital for over five months. It was expected that this child might become a carrier, but repeated cultures from his throat, nose and wounds had failed to reveal virulent organisms. Altogether, about 40 cultures were taken from this child and all were negative. Another case involving two brothers of a child sent home is accepted. In two other cases, in each of which the sister of a child sent home was admitted to Hospital, it was found on inquisition that the diphtheria organism had been recovered from the throats at the time that the first case was admitted, but the throats had subsequently cleared and no disease had developed until the recovered cases had been sent home again. The other return cases are not acceptable, for the return cases had either not come in contact with the alleged infectors, or were suffering from different diseases.

DEATHS IN THE HOSPITAL.

20 patients died; 9 from diphtheria, 5 from pneumonia, 1 from puerperal sepsis, 1 from tuberculous meningitis, 1 from Ludwig's angina complicating measles, 1 from senile oedema of the lungs and 2 from erysipelas.

DUNSTAN BREWER,
Medical Supt. Isolation Hospital.

Public Health Department,
61, Eastcott Hill,
Swindon.

BOROUGH OF SWINDON.

GENERAL STATISTICS.

Area (acres)	6021
Population: Census 1931	62407
Estd. middle of 1932	61990
Number of inhabited houses (1932)	15984
Rateable Value (General Rate) ...	£323,449
Sum represented by a penny rate	£1,313

EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

	Total	M.	F.	
Births: Legitimate ...	860	420	440	
Illegitimate ...	27	15	12	Birth Rate 14.31
Stillbirths: Legitimate	33	17	16	Stillbirth Rate per
Illegitimate	3	2	1	1000 births (Live and Still) 39.00
Deaths	724	357	367	Death Rate 11.68

Number of women dying in, or in consequence of childbirth:—

		Rate per 1,000 births (Live and Still):—
From sepsis ...	1	1.08
From other causes ...	1	1.08

Deaths of Infants under one year of age per 1,000 live births:—

Legitimate 53.49 Illegitimate 37.04 Total 52.99

Number of deaths from Measles (all ages)	3
,, ,, ,, Whooping Cough (all ages)	–
,, ,, ,, Diarrhoea (under 2 years of age) ...	1

INFECTIOUS DISEASE.

Table showing the numbers of Infectious Diseases notified in the Borough during the year 1932.

Disease.	Cases notified at various ages. (Years).												Total cases notified.	No. of cases admitted to Hospital.	Total Deaths.
	Under 1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and upwards.			
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	1	9	5	8	12	84	40	12	20	4	4	..	199	197	9
Erysipelas	..	..	..	..	1	1	1	..	5	..	7	2	17	2	1
Scarlet Fever	..	1	2	1	4	28	8	..	2	1	..	..	47	46	..
Ophthalmia Neonatorum	5	..	..	..	..	..	..	..	..	..	..	..	5	..	..
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia	23	18	15	11	9	18	6	8	29	19	15	11	182	53	44
Enteric Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis Lethargica	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1
Puerperal Pyrexia	..	..	..	..	..	..	..	8	37	9	1	..	55	4	1
Puerperal Fever	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..
Poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-spinal Meningitis	..	..	..	..	..	1	..	..	..	..	..	..	1	1	1
Polio-encephalitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis—															
(a) Pulmonary M	..	..	..	..	..	1	1	2	9	7	1	1	22	..	26
F	..	..	..	..	..	..	..	2	21	6	2	1	32	..	16
TOTAL	..	..	..	..	..	1	1	4	30	13	3	2	54	..	42
(b) Non-Pulmonary M	..	..	1	1	..	5	2	1	3	..	..	1	14	..	7
F	1	..	2	1	..	2	2	..	..	2	..	..	10	..	4
TOTAL	1	..	3	2	..	7	4	1	3	2	..	1	24	..	11
TOTALS	30	28	25	22	26	140	60	33	128	48	30	16	586	304	110

TABLE SHOWING MONTHLY INCIDENCE OF INFECTIOUS DISEASES AND THE NUMBER OF DEATHS DURING 1932.

Disease.	Number of Cases.												Total.	No. of Deaths.
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	13	6	16	21	8	13	—	1	7	30	38	46	199	9
Erysipelas	1	3	1	1	—	—	—	—	—	3	5	3	17	1
Scarlet Fever	1	5	1	—	2	2	8	5	3	10	9	1	47	—
Ophthalmia Neonatorum ..	—	—	—	1	1	1	—	1	—	—	—	1	5	—
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	31	32	23	12	7	13	6	11	7	13	12	15	182	44
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica ..	—	1	—	—	—	—	—	—	—	—	—	—	1	1
Puerperal Pyrexia	1	2	3	9	2	3	2	5	10	5	7	6	55	1
Puerperal Fever	1	—	—	—	—	—	—	—	—	—	—	—	1	—
Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Polio-encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal Meningitis ..	—	—	1	—	—	—	—	—	—	—	—	—	1	1
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	48	49	45	44	20	32	16	23	27	61	71	72	508	57

TUBERCULOSIS, 1932.

Age Periods.	New Cases. Pulmonary		Non-Pulm'ry		Deaths. Pulmonary		Non-Pulm'ry	
	M	F	M	F	M	F	M	F
Under 1 year ..	..	..	..	1	..	..	..	1
1—5 ..	..	..	3	3	..	..	2	1
5—10 ..	1	..	6	2	..	..	..	1
10—15 ..	1	..	2	2	..	..	..	..
15—20 ..	2	3	..	..	..	..	..	1
20—25 ..	3	5	2	..	3	1	1	..
25—35 ..	6	17	2	..	9	7	..	..
35—45 ..	8	6	..	2	6	3	3	..
45—55 ..	4	3	..	..	5	4	..	1
55—65 ..	1	..	..	..	1	..	..	..
65 and over ..	1	1	1	..	2	..	1	..
Totals ..	27	35	16	10	26	15	7	5

DEATHS FROM TUBERCULOSIS, 1932.

TABLE SHEWING WHEN CASES WERE NOTIFIED.

When Notified.	Pulmonary.		Non-Pulmonary.	
	Males.	Females	Males.	Females
One year or more before death	8	5	2	..
Less than one year and more than 6 months before death	3	2	1	..
Less than six months and more than two months before death	3	2	..	..
Less than two months before death ..	5	2	2	1
At or immediately before death	5	3	1	3
Unnotified. (Cases who died outside the Borough and never notified to Swindon).	2	1	1	1
Totals	26	15	7	5

Comparative statement showing the number of notifications received of the various forms of Tuberculosis and the Death Rates resulting from each form of the disease for the years 1915-1932.

	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915
No. of cases notified (all forms)	88	80	86	98	114	102	94	91	111	117	103	98	97	73	116	129	132	140
Respiratory Tuberculosis ..	62	52	41	57	69	70	56	66	75	75	68	63	72	51	86	102	95	86
Deaths from Respiratory Tuberculosis	41	40	37	23	40	45	30	42	42	48	59	42	55	44	66	60	48	51
Deaths from Tuber. Meningitis	5	3	3	3	6	1	8	5	4	12	6	11	8	8	11	8	10	10
Deaths from other forms of the disease	7	3	12	1	2	9	3	4	7	7	6	12	6	8	11	10	10	8
Total deaths from Tuberculosis	53	46	52	27	48	55	41	51	53	67	71	65	69	60	88	78	68	69
General Death Rate for all forms of Tuberculosis	0.85	0.73	0.84	0.44	0.82	0.96	0.71	0.89	0.93	1.19	1.27	1.17	1.28	1 16	1.74	1.5	1.3	1.32
Death Rate for Respiratory Tuberculosis	0.66	0.64	0.60	0.37	0.68	0.78	0.5	0.73	0.74	0.85	1.05	0.75	1.02	0.85	1.30	1.15	0.95	0.98

BACTERIOLOGICAL INVESTIGATIONS.

	Public Health Dept.					School Medical Dept.				
	1928	1929	1930	1931	1932	1928	1929	1930	1931	1932
Examinations carried out by Bristol or Liverpool Universities ..	13	26	26	15	18	1	..	..	..	..
Examinations carried out at Gorse Hill Hospital :—										
Throat Swabs examined	168	115	524	482	786	..	..	..	..	..
Urine : Examination for Tubercle bacilli	..	..	..	..	..	..	..	..	..	..
Examinations carried out at 61, Eastcott Hill :										
Throat ; swabs examined	244	241	851	852	1216	21	5	84	73	33
Eyes ; swabs examined direct	55	36	55	43	50	6	2	5	..	..
Pus and discharges :—										
For Tubercle bacilli	9	6	10	5	4	1	..	..	1	..
For other organisms (cultures)	22	66	54	9	47	1	2	..	..	..
Hair. Examinations for Ringworm fungus	..	..	5	6	..	271	206	89	56	18
Other conditions	1	..	..	..	..	2	..	1	..	..
Blood, Histological examinations	14	12	16	27	27	56	35	25	86	181
Blood for Wassermann-Reaction	..	..	..	..	..	1	..	..	..	..
Cerebro-spinal fluid	1	8	4	1	4	..	..	..	..	..
Sputum. For Tubercle bacilli	2	1	1	..	..	1	..	..	..	..
For other organisms	..	..	..	..	..	..	..	..	..	..
Urine-Chemical examinations	49	24	76	22	20	23	18	16	8	12
,, Microscopical examinations	17	9	10	18	14	19	4	2	7	8
,, Bacteriological examinations	..	..	..	..	..	..	..	..	..	..
For diseased meat	23	17	2	2	..	..	..	..	..	..
Miscellaneous	22	2	11	3	..	..	..	68	1	13
Totals	640	563	1645	1485	2186	403	272	290	232	265

No. of samples of water submitted for chemical and bacteriological analysis during 1932	24
No. of samples of sewage effluent submitted for chemical examination during 1932	12

REVIEW OF THE COMPARATIVE VITAL & MORTALITY STATISTICS FOR THE BOROUGH OF SWINDON, TOGETHER WITH THOSE FOR ENGLAND AND WALES FOR THE YEARS 1901 TO 1932 INCLUSIVE.

	Birth Rate.		Death Rate		Infant Mortality Rate		Illegitimate Death Rate
Year	Swindon	England and Wales	Swindon	England and Wales	Swindon	England and Wales	
1901	30.6	28.5	11.8	16.9	102.9	151	—
1902	28.3	28.5	12.7	16.3	104.7	133	—
1903	29.5	28.5	11.27	15.5	106.9	132	—
1904	30.0	28.0	12.49	16.3	111.2	145	—
1905	28.4	27.3	11.2	15.3	95.4	128	—
1906	29.4	27.2	9.9	15.5	86.2	132	—
1907	28.8	26.5	12.3	15.1	91.8	118	—
1908	28 9	26.7	11 8	14.8	101.5	120	—
1909	26.5	25.8	10.8	14.6	78.2	109	—
1910	23.4	25.1	9.7	13.5	86.8	105	—
1911	21.6	24.3	10.9	14.6	103.1	130	—
1912	24.4	23.9	10.3	13.3	76 3	95	—
1913	23.39	24.1	12.08	13.8	86.4	108	—
1914	22.5	24.8	11 5	14.0	73.7	105	—
19 5	21.16	21.9	12.83	15.7	67.7	110	—
1916	18.9	20.9	11.3	14.4	72.4	91	—
1917	15.5	17.8	12.25	14.4	88.6	96	—
1918	16.53	17.7	15.13	17.6	81.3	97	129.63
1919	16 86	18.5	11.97	13.8	83.9	89	79.52
1920	23.25	25.4	11.64	12.4	69.0	80	122.44
1921	20.27	22.4	9.58	12.1	67.5	83	102.56
1922	18.98	20.6	12.17	12.9	60.5	77	121.95
1923	17.77	19.7	9.27	11.6	53.2	69	83.33
1924	17.11	18.8	10.78	12.2	63.01	75	192.30
1925	16 56	18.3	11.09	12.2	60.5	75	52.63
1926	17.09	17.8	10.67	11.6	47.95	70	193.54
1927	14.52	16.7	11.16	12.3	46.98	69	107.14
1928	15.63	16.7	9.92	11.7	36.26	65	51.28
1929	13.98	16.3	10.96	13.4	47.29	74	32.26
1930	15.66	16.3	10.77	11.4	62.82	60	157.89
1931	14.51	15.8	10.88	12.3	56.04	66	136.36
1932	14.31	15.3	11.68	12.0	52.99	65	37 04

BOROUGH OF SWINDON.

CAUSES OF DEATH, 1932.

(Registrar-General's Official Returns).

Causes.	Males.	Females.	Total.
Measles	3	—	3
Diphtheria	3	5	8
Influenza	7	10	17
Cerebro-spinal Fever	1	—	1
Tuberculosis of Respiratory System	24	14	38
Other Tuberculous Diseases	10	6	16
Syphilis	1	—	1
General Paralysis of the Insane, Tabes dorsalis ..	2	1	3
Cancer, Malignant Disease	46	55	101
Diabetes	—	5	5
Cerebral Haemorrhage, &c.	17	38	55
Heart Disease	73	81	154
Aneurysm	—	1	1
Other Circulatory Diseases	15	14	29
Bronchitis	17	18	35
Pneumonia (all forms)	16	21	37
Other Respiratory Diseases	7	4	11
Peptic Ulcer	3	3	6
Diarrhœa, etc. (under 2 years)	—	1	1
Appendicitis	2	1	3
Cirrhosis of Liver	1		1
Other Diseases of Liver, etc.	1	4	5
Other Digestive Diseases	6	5	11
Acute and Chronic Nephritis	10	8	18
Puerperal Sepsis	—	1	1
Other Puerperal Causes	—	1	1
Congenital Debility, Premature Birth, Malformations, &c.	17	14	31
Senility	27	23	50
Suicide	4	1	5
Other Violence	16	7	23
Other Defined Diseases	28	24	52
Causes Ill-defined or Unknown	—	1	1
	357	367	724

BOROUGH OF SWINDON.

INFANT MORTALITY.

1932. *Nett Deaths from stated causes at various ages under One Year of Age.*

Compiled from the Official Registrations.

CAUSES OF DEATH.	Under 1 week.	1—2 weeks.	2—3 weeks.	3—4 weeks.	Total under 1 month.	1—3 months.	3—6 months.	6—9 months.	9—12 months.	Total Deaths under 1 year.
All Causes:—										
Certified	17	5	3	3	28	7	3	3	5	46
Uncertified	..	..	..	..	..	1	..	..	..	1
Small-pox	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup ..	..	..	..	1	1	..	..	..	..	1
Whooping Cough ..	..	..	..	..	..	..	..	..	..	..
Diarrhoea	..	..	..	..	..	..	..	..	..	..
Enteritis	..	..	..	.		1	..	..	..	1
Tuberculous Meningitis ..	..	..	..	..	..	..	..	..	1	1
Abdominal Tuberculosis ..	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Disease	..	..	..	..	..	..	..	..	..	..
Congenital Malformations..	3	..	..	..	3	3	..	..	..	6
Premature Birth	8	1	3	1	13	1	..	..	..	14
Atrophy, Debility and Marasmus	3	..	..	1	4	1	..	..	..	5
Atelectasis	..	..	..	..	..	..	..	..	..	..
Injury at Birth	2	2	..	..	4	..	..	..	..	4
Erysipelas	..	..	..	..	..	..	..	..	..	..
Syphilis	..	..	..	..	..	..	..	..	..	..
Rickets	..	..	..	..	..	..	..	1	..	1
Meningitis (not Tuberculous)	..	..	..	..	..	..	..	..	..	..
Convulsions	1	..	..	..	1	..	1	..	..	2
Gastritis	..	..	..	..	..	..	..	..	..	..
Laryngitis	..	..	..	..	..	..	..	..	..	..
Bronchitis		..	..	..	..	..	..	..	1	1
Pneumonia (all forms) ..	..	2	..	..	2	1	2	1	3	9
Suffocation, overlying ..	..	..	..	..	..	..	..	..	..	..
Influenza	..	..	..	..	..	..	..	1	..	1
Purpura	..	..	..	..	..	1	..	..	..	1
TOTALS ..	17	5	3	3	28	8	3	3	5	47

LIST OF HOSPITALS PROVIDED OR SUBSIDISED BY THE LOCAL AUTHORITY OR BY THE COUNTY COUNCIL.

TUBERCULOSIS.	Two beds at Winsley Sanatorium, near Bath, provided by the local authority. The Wilts County Council has two sanatoria for the treatment of tuberculosis; one at Winsley for early cases and the other at Harnwood, near Salisbury, for advanced cases.
MATERNITY.	A Maternity Home of 24 beds provided by the local authority.
CHILDREN.	Nil.
FEVER.	A fever hospital of 70 beds provided by the local authority.
SMALLPOX.	A Smallpox Hospital provided by the Wilts County Council.
VENEREAL DISEASES.	A hospital with 6 beds provided by the Wilts County Council.
ORTHOPAEDIC.	Use of beds in Bath Orthopaedic Hospital.

LIST OF CLINICAL TREATMENT CENTRES IN THE BOROUGH OF SWINDON.

Name of Clinic.	Where Held.	Days and hours of attendance.	By Whom Provided.
Maternity and Child Welfare ..	61, Eastcott Hill	Mondays, Wednesdays and Fridays, 2 p.m. to 4.30 p.m.	Swindon Corporation
Maternity and Child Welfare ..	Girls' Club, St. Paul's Street	Tuesdays, 2 p.m. to 4 p.m.	,, ,,
Maternity and Child Welfare ..	Primitive Methodist School, Romsey Street	Thursdays, 2 p.m. to 4 p.m. ..	,, ,,
Ante-Natal Clinic	Primitive Methodist Church, Pinehurst	Mondays, 2 p.m. to 4 p.m.	,, ,,
Consultation Ante-Natal Clinic ..	37, Milton Road	Tuesdays, Thursdays, Fridays and Saturdays, 2 p.m. to 4.30 p.m. ..	,, ,,
Minor Ailments	Maternity Home, Kingshill	Second and Fourth Wednesdays in each month from 2.30 to 4 p.m. ..	,, ,,
Dental Clinic	61, Eastcott Hill	Every morning 9 a.m. to 11 a.m. ..	,, ,,
Eye Clinic	Faringdon Road	Daily, 9.30 a.m. to 12.30 p.m., & 2 p.m. to 5 p.m. (Sats. 10 a.m. to 12.30 p.m.)	,, ,,
Ringworm Clinic	61, Eastcott Hill	Tuesdays, 2 p.m. to 4.30 p.m. ..	,, ,,
Throat, Nose and Ear Clinic ..	,, ,, ...	Tuesdays, 2 p.m. to 5 p.m.	,, ,,
Enlarged Thyroid Glands ..	,, ,, ...	Mondays, 2 p.m. to 5 p.m.	,, ,,
X-Ray Clinic	,, ,, ...	Thursdays, 2 p.m. to 5 p.m. ..	,, ,,
Electrical Treatment (General) ..	,, ,, ...	Thursdays, 2 p.m. to 5 p.m. ..	,, ,,
Electrical Ionization Clinic ..	,, ,, ...	Mondays, 2 p.m. to 4 p.m ..	,, ,,
Observation Clinic	,, ,, ...	Fridays, 2 p.m. to 4.30 p.m. ..	,, ,,
Tuberculosis Clinic	Tuberculosis Dispensary, Milton Road	Saturdays, 9.30 a.m. to 12 noon ..	,, ,,
Venereal Diseases Clinic ..	Isolation Hospital, Gorse Hill	Thursdays, 10 a.m. to 3 p.m. ..	Wilts County Council
		Men —Wednesdays, 6.30 p.m. to 8 30 p.m. Fridays, 6 p.m. to 8 p.m.	,, ,, ,,
		Women and Children :— Mondays, 5 p.m. to 7 p.m. Fridays, 2 p.m. to 4 p.m.	
Orthopaedic Clinic	Isolation Hospital Grounds, Gorse Hill	Tuesdays 11 a.m. to 5 p.m. ..	Voluntary Association

AMBULANCE FACILITIES.

(a) For Infectious Diseases.	Two Motor Ambulances are supplied by the Swindon Town Council.
(b) For non-infectious and accident cases.	A Motor Ambulance is provided by the Swindon Town Council.

LIST OF LOCAL ACTS, SPECIAL LOCAL ORDERS AND GENERAL ADOPTIVE ACTS IN FORCE IN THE DISTRICT.

LOCAL ACTS AND ORDERS.

Swindon Water Act, 1894.
Swindon New Town Electric Lighting Order, 1895.
Swindon (Water) Orders of 1902 and 1919.
The Swindon Corporation Act, 1904.
Swindon Corporation (Wilts and Berks Canal Abandonment) Act, 1914.
The Swindon Order, 1923.
The Swindon Order, 1925.
Swindon Corporation Act, 1926.
The Swindon Order, 1927.
The Swindon (Extension) Order, 1928.
The Swindon Electricity (Extension) Special Order, 1929.
Public Works Facilities Scheme (Swindon Corporation) Act, 1931.

ADOPTIVE ACTS IN FORCE.	Date of Adoption.
The Public Health Acts Amendment Act, 1890	11th Nov., 1890.
Infectious Diseases (Prevention) Act, 1890	11th March, 1902.
The Museums and Gymnasiums Act, 1891 (so far as it relates to museums)	6th June, 1905.
The Local Government and Other Officers Superannuation Act, 1922	1st July, 1924.

THE PUBLIC HEALTH ACTS AMENDMENT ACT, 1907:—

Section 85 (Registries for Servants).	22nd Dec., 1926.
Part III., Secs. 36, 37, 49, 50 and 51. Part IV., Secs. 62, 64 and 65. Part X., Sec. 93.	3rd Jan., 1927.

THE PUBLIC HEALTH ACT, 1925:—

Part II. (except Secs. 20, 24 and 29). Part III. Part IV. Part V.	1st Feb., 1927.

APPENDIX.

BOROUGH OF SWINDON.

ANNUAL REPORT

OF THE

Chief Sanitary Inspector

F. H. BEAVIS

For the Year 1932.

To the Chairman and Members of the Health, &c., Committee.

LADIES AND GENTLEMEN,

I have the honour of submitting my seventh Annual Report dealing with the work carried out by the Sanitary Department during the year ended 31st December, 1932.

Appended hereto will be found the tables giving full particulars of the inspections made during the year, in conformity with the requirements of the Ministry of Health.

During the year under review, the personnel of the Sanitary Staff underwent no change.

MILK SUPPLY.

Swindon, being situated in the midst of an agricultural district where milk production is extensively carried on, occupies a very favourable position so far as milk supply is concerned. Practically the whole of the milk is brought in direct from the farm and delivered to the consumer with a minimum of handling and within a very short period of its being obtained from the cow. Most of the milk has been thoroughly cooled at the place of production, and reaches the consumer in excellent condition.

The demand for pasteurised milk is on the increase, but I am sorry to say that the demand for "graded" milk has fallen somewhat during the year. Perhaps this is accounted for by the fact that, in these hard times, housewives cannot afford to pay the extra cost of the graded milk. To me, this is rather a pity, because I am of opinion that natural milk of a guaranteed purity is decidedly preferable to the treated milk, no matter what the process of treatment may be.

There was one prosecution during the year, for bottling milk in the street, when the offender was fined £1, including costs. Bottling milk in the streets is most objectionable, and a very strict watch is kept by your inspectors throughout the year in order to prevent this from being done.

The taking of samples of Grade A (Tuberculin Tested) milk has been delegated to the Town Council by the Ministry of Health. During the year, 11 samples were taken, when only one was found to be unsatisfactory. Steps were immediately taken to remedy this, and the remainder of the samples were satisfactory.

One farm and one bottling establishment are licensed for the production and distribution respectively of Grade A (Tuber-

culin Tested) milk. One farm and two milk shops are licensed for the production and distribution respectively of Grade A milk. There are two retailers who are licensed to sell Pasteurised milk, and one licence has been issued for the Pasteurisation of milk within the Borough. There is one retailer of Grade A milk from outside the Borough, who also possesses a subsidiary licence to sell Grade A (Tuberculin Tested) milk.

FOOD SUPPLY.

The tables appended hereto give a résumé of the work carried out under the Public Health (Meat) Regulations, 1924. A total of 15,762 animals was slaughtered during the year, every one of which was seen by your inspectors before being offered for sale. Meat and food inspection constitutes a very important branch of the manifold duties of the sanitary inspector, inasmuch as it is only by a system of careful inspection, usually working at full pressure, that the health of the general public is safeguarded, and unsound food is prevented from reaching the consumer. Outside traffic in dead meat still continues, and constant watchfulness is absolutely essential in order to stop meat of doubtful quality from being brought into the Borough. The inspection of dead meat from outside districts will never be placed on a satisfactory basis until legislation is passed giving the Town Council power to require that all meat brought into Swindon shall pass through a recognised clearing-house before being offered to the public.

The unsound food amounted to just over 20 tons. This is about the same as last year, but on the whole, the quality of meat being sold in Swindon is certainly improving. This will be seen by reference to the year 1927, when no less than 56 tons of unsound food were condemned.

There was one case of exposing diseased meat for sale in a butcher's shop, and proceedings against the offender are pending.

The question of a Public Abattoir has apparently been shelved on account of economy, but everyone will agree that the need for an Abattoir is very real.

CASEOUS LYMPHADENITIS.

During the year, consignments of frozen mutton, amounting to 263 carcases, were examined at the Cold Stores, Catherine Street. Out of this number, only two carcases were found to be affected with the disease.

INSTRUCTION IN MEAT AND FOOD INSPECTION.

In the early part of the year, a course of instruction in Meat and Food Inspection, for Sanitary Inspectors, was held at The College, Swindon. Thirty-five inspectors from the surrounding districts enrolled, and the average attendance was twenty-six. Sixteen lectures were held at The College, and after each lecture a practical demonstration in meat inspection was held at the King Street Depôt. Specimens of rare diseases were obtained from Birmingham, Bristol and other large cities. The course was greatly appreciated by those attending, and our best thanks are due to the Education Committee for granting us the use of a room at The College free of charge, and to the Health, etc., Committee for the use of the King Street Depôt for demonstration purposes. At the end of the course, eight of the students sat for the examination of the Royal Sanitary Institute in Meat and Food Inspection, five being successful.

HOUSING.

The problem of housing the very poor is still with us, and so long as the cost of building continues at its present high level, this problem will remain unsolved for the simple reason that these unfortunate people cannot afford the economic rents demanded for new houses. This factor, coupled with a certain amount of unemployment, helps to swell the number of cases of overcrowding, with which it is practically impossible to deal. In one case, where the unfit house had been reported to the Local Authority, and the owner had given an undertaking not to use it as a dwelling, I was successful in persuading him to re-condition it, and this house is now let at 4/6 per week inclusive. In my opinion, this served a very useful purpose, for this rent is one which poorer people are able to pay.

The only case in which it was necessary to take extreme measures was one in which the sub-tenant refused to quit the house, on which a Demolition Order had been made owing to its being unsafe. In this case, Police Court proceedings had to be taken before possession could be obtained. Nevertheless, although there was very little litigation, much useful housing work was accomplished during 1932. 8 houses were erected by the Local Authority, and 144 by private individuals, as compared with 76 and 149 respectively, in 1931.

TENTS, VANS AND SHEDS.

At present there are very few caravans being used for human habitation within the Borough. However, there are still one

or two which one would like to see given up. The occupants of these caravans keep strictly within the bye-laws in force respecting these structures, and so long as they continue to do so it is extremely difficult to deal effectively with this problem.

THEATRES, CINEMAS, ETC.

There are at present six cinemas, two billiard halls and twenty-two dancing halls licensed within the Borough. These premises are regularly visited by your inspectors, so as to ensure their being kept in a cleanly and sanitary condition. In one instance, the whole of the drainage system and all the sanitary fittings were renewed.

DISINFECTION OF VEHICLES AT THE CATTLE MARKET.

The disinfection of vehicles used for the conveyance of animals, at the Cattle Market, is carried out under the direct supervision of the Sanitary Department. A small charge is made by the Corporation for this service, and a table is appended, showing the particulars of the receipts and expenditure incurred during the year 1932. It must be clearly understood, however, that this table is not an accurate statement so far as profit and loss is concerned, as it does not include the cost of collection, disinfectants, plant, etc., but only gives the actual amount expended on casual labour.

DRAINAGE WORK.

During the year, the drainage systems of 178 houses were either relaid or overhauled. In many cases, it was found that the existing drains were nothing less than elongated cess-pools, whilst others were found to be so defective as to cause the soil surrounding them to become impregnated with filth. The supervision of drainage work takes up a considerable amount of time, but from a health point of view too much attention cannot be given to this important work. In the added areas, the drainage is gradually being brought up to date, but there is still a great deal to be done in order to bring these areas up to a satisfactory standard.

RATS AND MICE DESTRUCTION.

The fine weather during the summer of 1932 was very favourable for the propagation of both rats and mice. These vermin seem to forsake the various tips and to seek fresh quarters in the open during the warm weather; consequently, small colonies of

the pests were discovered in all parts of the town and in the hedgerows adjoining the allotments. Trapping, baiting and smoking the runs were resorted to, and every effort was made to keep their numbers under control. However, when the inclement weather set in, the rodents returned to the tips to take up their winter quarters. A concentrated attack was made upon them during Rat Week, and continuous "warfare" was carried on during the year. Although we shall never be able to rid the tips of these pests, we have, by the methods employed, succeeded in keeping their numbers down, and the tips are now clearer of rats that I have ever seen them. A perusal of the table under this heading will show that over 7,000 of these vermin were accounted for during the year, and that much useful work is being accomplished.

GENERAL.

Early in May, a terrific thunder-storm, accompanied by torrential rain, broke over the town and surrounding districts. Consequently a large number of complaints was received of flooding in the lower-lying areas. At Southbrook the allotment-holders complained that their seeds had been washed away owing to the brook being unable to cope with the volume of water. Little could be done on account of the exceptional nature of the storm, but your inspector succeeded in getting the brook cleaned out. At Kingshill, the pond at the top of Hillside Avenue overflowed, and the water rushed through the houses. A drain has since been put in by the owners, which will lower the level of the water in the pond by about two feet; this should prevent any flooding from the pond in the future.

I am, Ladies and Gentlemen,

Your obedient servant,

F. H. BEAVIS,
Chief Sanitary Inspector.

SANITARY STATISTICS.

TABLE OF NUISANCES RECORDED AND ABATED, 1932.

Nature of Complaints registered.	Defects brought forward from 1931	Complaints received and visited during 1932	Total	No. of complaints abated during 1932	No. of cases not abated at end of year.
Defective drains	28	180	208	172	36
,, traps	4	49	53	50	3
,, spouts and eaves troughing ...	25	62	87	72	15
,, roofs	20	79	99	79	20
,, and dirty W.C. pans	5	108	113	105	8
,, floors	26	64	90	68	22
,, and insufficient yard paving ...	14	46	60	46	14
,, walls	38	101	139	114	25
,, flushing cisterns	5	44	49	42	7
,, ceilings	14	50	64	40	24
,, forecourts	6	8	14	12	2
,, sinks	1	11	12	10	2
Offensive animals	1	5	6	5	1
Offensive accumulations	8	87	95	89	6
Choked drains	14	285	299	294	5
Damp walls	10	39	49	40	9
Dirty rooms	86	368	454	364	90
Overcrowding	7	6	13	11	2
Absence of covered receptacle at butchers' premises	—	5	5	5	—
Miscellaneous	121	773	894	674	220
TOTALS	433	2370	2803	2292	511

VISITS AND INSPECTIONS, 1932.

Infectious Disease	395
Work in course of construction	2439
Slaughterhouses	4263
Bakehouses	91
Dairies, Cowsheds and Milkshops	408
Markets	446
Outworkers	27
Common Lodging Houses	20
Fried Fish Shops	989
Re-visits	2034
Miscellaneous	2668
Workshops	675
Ice Cream Shops	180
Butchers' Shops	351
Contacts with Smallpox	1
Pig-killing on private premises	115
House-to-House Inspections	213
TOTAL	15317

DEFECTS IN OUTWORKERS' PREMISES.

Dirty Floors	—
Dirty Ceilings	2
Dirty Walls	3
Defective Roofs	—
,, Water-closets	—
,, Floors	—
,, Yard Paving	—
,, Firegrates	—
,, Walls	1
,, Drains	—
Other Defects	1
TOTAL	7

INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Occupiers Prosecuted. (4)
Factories (including Factory Laundries)	165	8	Nil
Workshops (including Workshop Laundries)	449	16	Nil
Workplaces (other than Outworkers Premises)	61	8	Nil
TOTAL	675	32	Nil

DEFECTS FOUND IN FACTORIES, WORKSHOPS & WORKPLACES.—Contd.

Particulars. (1)	Number of Defects. Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	Number of Offences in respect to which Prosecutions were Instituted. (5)
*Nuisances under the Public Health Acts :—**				
Want of cleanliness	78	76	...	..
Want of ventilation	4	3	...	...
Overcrowding	...	...	...	..
Want of drainage of floors	5	3	...	...
Other nuisances	17	17	...	...
Sanitary accommodation—insufficient	3	2	...	...
Sanitary accommodation—unsuitable or defective ...	54	54	...	..
Sanitary accommodation—not separate for sexes ...	2	2	...	...
Offences under the Factory and Workshop Acts :—				
Illegal occupation of underground bakehouse (s. 101)	...	...	...	...
Other offences (Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)	...	...	...	..
TOTAL	163	157	...	...

* Including those specified in Sections 2, 3, 7 & 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

DISINFECTANTS.

Number of Applications	6146
Number of Applications Granted	6146
Quantity given: Fluid	763 gals. 5 pts.
Powder	12cwts. 0qrs. 7lbs.

DISINFECTION.

Cases of Cancer	33
,, Consumption	119
,, Infectious Disease	403
,, Smallpox	—
Verminous Rooms	264
School Rooms Disinfected	—
School Shawls Disinfected	49
Library Books Disinfected	107
Lots of Bedding Disinfected	609
Lots of Bedding Destroyed	57
Animals Destroyed	4
Miscellaneous Articles Destroyed	—
Miscellaneous Articles Disinfected	35

DAIRIES, COWSHEDS AND MILKSHOPS.

Dairies and Milkshops	62
Cowsheds	22
Milk Purveyors from outside the Borough ...	36
TOTAL	120

One farm and one bottling establishment are licensed for the production and distribution respectively of Grade A (Tuberculin Tested) Milk. One farm and two milk shops are licensed for the production and distribution respectively of Grade A Milk. There are two retailers who are licensed to sell Pasteurised Milk, and one licence has been issued for the Pasteurisation of Milk within the Borough. There is one retailer of Grade A Milk from outside the Borough, who also possesses a subsidiary licence to sell Grade A (Tuberculin Tested) Milk.

Inspections	408

DAIRIES, COWSHEDS AND MILKSHOPS.—Contd.

NUISANCES FOUND—

Dairies requiring limewashing	23
Cowsheds requiring limewashing	36
Dirty yards	—
Defective paving	4
Offensive accumulations	7
Defective ceiling plaster	—
Unsuitable and dirty utensils	1
Milk and containers uncovered	9
Defective floors	2
Defective vent shafts	—
Dirty conditions	3
Insufficient water supply	—
Choked drains	1
Defective water-closets	4
Defective drains	1
Miscellaneous	23
TOTAL	114

SLAUGHTERHOUSES.

Registered	8
Licensed	12
TOTAL	20
Number of Inspections	4263

NUISANCES FOUND—

Requiring limewashing	22
Want of cleanliness	4
Insanitary condition of pens and yards	9
Offensive accumulations	6
Choked drains	6
Other defects	33
TOTAL	80

COMMON LODGING HOUSES.

On Register	1
Number of persons for whom accommodation is provided:—Adults, 111; Children, 8.	
Inspections	20

RATS AND MICE (DESTRUCTION) ACT, 1919.

The following is a table showing the work carried out by your officer under the above Act during the year under review:—

Rats Caught.	Complaints Received.	Due to Defects of Drains or Sewers.	Due to Structural Defects.
7,759	292	35	10

BAKEHOUSES.

Factory Bakehouses	20
Workshop Bakehouses	7
Domestic Bakehouses	1
TOTAL	28
Number of Inspections	91

NUISANCES FOUND—

Limewashing overdue	26
Dirty yards	1
Ceilings requiring re-painting	—
Choked drains	—
Dirty W.C. pans	—
No separate accommodation for sexes	—
Accumulations of manure	2
Defective yard paving	—
Defective vent shafts	—
Want of cleanliness	7
Other defects	8
TOTAL	44

FOOD SUPPLY.

There are on the registers of the Department—

Butchers' Shops	93
Butchers' Stalls (in covered market)	4
Wholesale Meat Store	1
Fried Fish Shops	39
Ice Cream Shops	138
Cooked Meat Shops	43

and these premises are regularly inspected by your officers.

MEAT AND FOOD DESTROYED.

	Tons	cwts.	qrs.	lbs.
Carcases of Beef and Offal	7	14	1	0
Portions of Beef and Offal	3	4	3	22
Carcases of Pig and Offal	1	5	3	2
Portions of Pig and Offal	1	1	2	8
Carcases of Mutton and Offal		2	1	2
Portions of Mutton and Offal				25
Carcases of Veal and Offal		3	2	15
Portions of Veal and Offal				14
Heads	1	9	2	7
Lungs		5	2	21
Hearts				13½
Livers	1	3	1	25
Plucks		6	3	11½
Offal		16	0	26
Chilled Beef		6	0	19
Plate Corned Beef				2
Potatoes	1	17	0	0
Herrings		3	2	0
Prawns				10
6 Turkeys			2	0½
Chickens				6
52 Rabbits				—
TOTAL	20	2	0	5½

PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

The following table shows the number of carcases inspected during the year, together with the approximate average per week :—

	Beasts.	Calves.	Pigs.	Sheep.	Total.
Total Inspected ...	1050	1681	6111	6920	15,762
Approx. average per week	20	32	118	133	303

CLASSIFICATION OF THE DISEASES FOUND IN THE UNSOUND FOOD.

	Tons	cwts.	qrs.	lbs.
Abscesses		7	3	15
Actinomycosis			3	0
Amyloidosis		1	0	24
Angioma			1	24
Bruising	2	18	3	10
Caseous Lymphadenitis		1	0	1
Cirrhosis		1	1	18
Coccidiosis (Rabbits)				—
Contamination				4
Cystercercus Tenuicollis		1	0	20½
Decomposition	2	4	0	6
Degeneration				4
Distomum Hepaticum		13	0	23½
Echinococcus Veterinorum			1	10½
Fatty Degeneration		1	1	3
Fatty Infiltration		4	3	12
Gargot				6
Granular Eruption				1
Hyper-Nephrosis				7
Icterus		1	1	1
Inflammation		2	2	14½
Johnes Disease		16	3	14
Mastitis				7
Melanosis				7
Necrosis		1	0	13
Nephritis			2	17
Oedema		10	0	15
Pericarditis				19½
Peritonitis		7	2	18
Pleuritis		1	3	17
Pneumonia		9	0	26
Sarcoma			1	25
Strongylus Filaria				4
Strongylus Rufescens			1	23½
Swine Erysipelas			2	14
Tuberculosis	10	4	3	17
Unsoundness		7	0	11½
TOTAL	20	2	0	5½

HOUSING.

Number of new houses erected during the year :—

(*a*) Total (including numbers given separately under (*b*))	152
(*b*) With State assistance under the Housing Acts :—	
(i) By the Local Authority	8
(ii) By other bodies or persons	—

I. INSPECTION OF DWELLING-HOUSES DURING THE YEAR :—

(1) (*a*) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	1106
(*b*) Number of inspections made for the purpose ...	1106
(2) (*a*) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	213
(*b*) Number of inspections made for the purpose ...	213
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	Nil
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	893

II. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	757

III. ACTION UNDER STATUTORY POWERS DURING THE YEAR :—

A. Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 :

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	4
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(*a*) By owners	4
(*b*) By Local Authority in default of owners ...	Nil

B. Proceedings under Public Health Acts :

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	4

(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—

(*a*) By owners 3

(*b*) By Local Authority in default of owners ... Nil

C. Proceedings under Sections 19 and 21 of the Housing Act, 1930:

(1) Number of dwelling-houses in respect of which Demolition Orders were made 1

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders 1

D. Proceedings under Section 20 of the Housing Act, 1930:

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... ... Nil

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ... ... Nil

E. Proceedings under Section 3 of the Housing Act, 1925:

(1) Number of dwelling-houses in respect of which notices became operative requiring repairs ... Nil

(2) Number of dwelling-houses which were rendered fit after service of formal notices:—

(*a*) By owners ... ... Nil

(*b*) By Local Authority in default of owners ... Nil

(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ... Nil

F. Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925:

(1) Number of dwelling-houses in respect of which Closing Orders became operative ... ... Nil

(2) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit ... ... Nil

(3) Number of dwelling-houses in respect of which Demolition Orders became operative ... ... Nil

(4) Number of dwelling-houses demolished in pursuance of Demolition Orders ... ... Nil

DISINFECTION OF VEHICLES AT THE CATTLE MARKET.

Month.	No. of Vehicles Disinfected.	Fees Received.	Expenditure.
1932.		£ s. d.	£ s. d.
January	146	3 13 0	2 6 0
February	147	3 13 6	2 15 0
March	105	2 12 6	2 1 0
April	128	3 4 0	2 6 0
May	117	2 18 6	2 11 0
June	80	2 0 0	2 6 0
July	82	2 1 0	2 6 0
August	108	2 14 0	2 11 0
September	115	2 17 6	2 6 0
October	179	4 9 6	3 0 0
November	124	3 2 0	2 6 0
December	99	2 9 6	2 2 0
Totals ...	1,430	£35 15 0	£28 16 0

BOROUGH OF SWINDON.

ANNUAL REPORT

OF THE

School Medical Officer

(DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.)

For the Year 1932.

BOROUGH OF SWINDON

EDUCATION COMMITTEE.

* CHAIRMAN — Councillor C. HILL, J.P.
* VICE-CHAIRMAN — Councillor H. L. HOWARTH.

MEMBERS.

THE MAYOR (Alderman W. R. ROBINS, J.P.).

Alderman F. T. HOBBS.
* Alderman A. E. HARDING.
* Mrs. Councillor S. ANDREWS.
Councillor L. J. NEWMAN.
Councillor J. BELCHER.
* Councillor W. SEATON.
* Mrs. A. J. COLBORNE.
Mr. R. GEORGE.
* Miss M. E. SLADE.

† Mrs. Alderman M. GEORGE.
* Alderman A. R. SMITH.
Alderman R. G. CRIPPS.
* Councillor T. MANNING.
Councillor H. St. D. WHITE.
* Mr. W. D. BAVIN.
Mr. J. HASKINS.
Mr. A. W. HAYNES, J.P.
Mr. H. WHITING, J.P.

* Mr. J. L. CALDERWOOD, J.P.

Director of Education—Mr. STANLEY HIRST, B.Sc.

* *Members of the Medical Inspection Sub-Committee.*
† *Chairman of the Medical Inspection Sub-Committee.*

STAFF.

School Medical Officer—DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.

Assistant School Medical Officers—
J. STEVENSON LOGAN, M.B., Ch.B., D.P.H.
VIOLET REDMAN KING, M.B., Ch.B. (Leeds).

Specialist Ophthalmic Surgeon.
OLIVER BEAKLEY PRATT, M.A., M.B., B.Ch., (Oxon) D.O., M.R.C.S., L.R.C.P.

Specialist Nose, Throat and Ear Diseases.
F. COURTENAY MASON, B.A., Lond. M.S., M.B., B.S., F.R.C.S. (Eng.)

Dental Surgeons—W. KENYON BERRIE, L.D.S., R.F.P.S.G.
KENNETH W. MASSEY, L.D.S. (Liverpool).

Head Clerk—S. MANSFIELD DEE.

Assistant Clerks—MISS GLADYS L. NORRIS.
JOHN W. DAY

School Nurses—

Miss A. M. HOARE.
2 years Certificate of Hospital Training.
Certificate of Central Midwives Board.
Certificate of the Royal Sanitary Institute.

Miss I. D. SAMPSON.
3 years Certificate of Hospital Training.
Certificate for Tuberculosis (Royal Chest Hospital, London).
Queen's Nurse.
Certificate of Central Midwives Board.

Miss E. M. PILCHER.
3 years Certificate of Hospital Training.
School Nurses and Health Visitors and Tuberculosis Certificate.
Certificate of the Royal Sanitary Institute.

Miss A. HAWKINS.
4 years Certificate of Hospital Training.
Certificate of Central Midwives Board.

BOROUGH OF SWINDON.

EDUCATION COMMITTEE.

Area	6021	Acres
Number of Elementary Schools	16	
Number of School Departments	34	
Recognised Accommodation	11334	
Number of Children on Register	9543	
Average Attendance	8394	

Number of Secondary Schools	3	
Number of Scholars on Roll:—		
The College, Secondary School ...	290	
Euclid Street Secondary School ...	248	
The Commonweal Secondary School	297	

To the Chairman and Members of the Education Committee of the Borough of Swindon.

LADIES AND GENTLEMEN,

I have pleasure in presenting the report upon the Medical Inspection and Treatment of School Children in the Borough for the year 1932.

About eight years ago the school medical department was overhauled and brought up-to-date. Since then it has been left alone (except that additions have been made to it as they became available), whilst the two other main functions of public health, maternity and child welfare and epidemiology, were brought to an equal state of development. It now remains to weld the whole together to give expression to the ideal at which we aimed—to guard the health of every citizen in the borough from conception to death, and to keep in one continuous record his biological history. That such an ambitious undertaking is possible of realisation we were never in doubt, though the Author has neither the hope nor expectation of seeing its fulfilment. The value of such a system is obvious; nor need we say more of the difficulties of obtaining it, than that it calls for an inflexible determination and exercise of wit to prevent it from breaking up into sections. To maintain unity all parts of the code have to be revised periodically. This is particularly necessary in the school medical service which, owing to the large number of specialists that have to be employed, is most liable to degenerate into departments. The unit is the citizen who must never be allowed to become a "case." He starts at conception and the first matter in which he requires guidance is his heredity. Here, at present, we can do nothing. The next call is the care of him when he is in his mother's womb. This is the most important part of his life, for more than 90% of his development takes place during this period and unless this is perfect in every detail, his future life is handicapped, or is useless, or worse. Here we can do something by ante-natal attention to his mother and by arrangement for his delivery with the least possible strain, or danger. After he is born he requires careful supervision during his infancy and that still more important period when he is becoming independent of his mother. Thence he passes into the school age with its special dangers and through the difficult times of puberty and adolescence before he becomes an adult and can be left to shift for himself.

The value of his adult life is, to a great extent, dependent upon the care he has received during the long period of his development. From the financial point of view, which if it is soundly visualised is as good a way of considering the matter as any other, the citizen is an asset to the community as a tax-payer and a drawback as a tax-spender. In the state of civilisation which is

now passing away, taxes were raised mainly from property, but as this source of revenue has melted, in the future taxation must come mainly from industry. As the creation of wealth by industry depends on the ability, the training and health of the citizens, it is clear that it is worth some outlay to ensure the soundness of the two last, for upon the first we can exert little influence. Whereas it is very sound policy to spend well and sometimes lavishly to train citizens, it does not pay at all to rear pathological specimens which are no use to themselves, or to the community. Endure them we must and out of our wealth it is a duty to give them such relief as lay in our power; but to found our system of child-rearing on attention to the worthless and neglect of the useful is foolish, inhuman and altogether contemptible. Yet there is a continuous urge to go in this direction, for the treatment of disease, whether it be physical, mental, moral, or social, is more sensational than its prevention and the fruit of endeavour more readily and immediately apparent. The profession of medicine, as a social service, is worshipped in its capacity of relieving the sick; it is almost, but now not quite, ignored in its capacity to keep the community healthy. Prevention, therefore, works at a disadvantage and those who practise it have the most powerful urge to forsake it for more respected, but far less useful, work. In no department of human endeavour is this more insistent than in school medicine and consequently in nothing is it more difficult to keep to the main issue of ensuring healthy citizens.

FINDINGS OF MEDICAL INSPECTION.

The chief point in connection with medical inspection is the improvement of the percentage of children found fully efficient on inspection. It will be seen from Table XIV that of the "Entrants" 81% were efficient. In 1925 the percentage of efficient infants was 44. In that year the efficiency of the children in the upper departments was 46%, whereas last year it was 74%. This improvement is, in the main, the expected fruit of the system. Though it is difficult to compare one year's figures with another's, particularly if there has been any change in the inspectorate, for some years there has been a fixed scale for computing defects and, as the inspectors have remained the same, the figures are comparable, so the improvement is genuine. There was in 1932 some decline in the level of nutrition; the number of children discovered definitely malnourished was 89 against 34 in 1931. Ringworm of the scalp, which had been declining rapidly for some years, reached the low record of six against eleven for last year, but there was an increase of ringworm of the body to 23 against 14. Ringworm of the body, however, is a condition of very trivial importance as it can be cured rapidly. There was a drop in nose, throat and ear diseases, which was expected, owing to the low incidence of those endemic infections which

leave chronic throat diseases as a legacy. 28.8% of all children inspected were found to require some form of treatment, mostly of a minor character.

PROVISION OF MEALS.

The Education (Provision of Meals) Acts of 1906 and 1914, were in force in the borough throughout the year. There was a considerable increase in the number of children requiring this provision, but though employment in the town was less favourable than it had been in any year since the war and, unfortunately, shows no signs of improving, the call for provision of meals to school children is still comparatively slight, so we did not, during 1932, find it necessary to introduce any modification of the scheme which had been in force during more prosperous times.

SCHOOL BATHS.

There are no school baths in Swindon, nor indeed, are there any public baths. The Great Western Railway Medical Fund Society possesses private baths and swimming baths which, for all practical purposes, are open to the public. The swimming instruction of the scholars is carried out in these baths.

EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

There is no employment of young children in Swindon. The Juvenile Employment Committee looks after children and young persons and this Committee is in constant touch with the school medical department. Since practically all the children in Swindon are known to the school medical department, which possesses life records of them during their childhood, co-operation is comparatively simple.

SPECIAL INQUIRIES.

The special inquiries in progress in Swindon were continued during 1932. These inquiries are matters not of months, but of many years. From time to time it is felt advisable to publish some of the results obtained, but the inquiries themselves are never ending; or at least will not end until we find a complete solution of the problems investigated which, to be perfectly frank, is unlikely to be achieved within the lifetime of anyone living. These inquiries have, however, helped us to form the base upon which the scheme of child supervision stands. Though the information obtained is extracted in an impersonal manner for research

purposes, it is also available in a personal form on the records of the children and becomes part of their history. Often this is of very great value in explaining disease in later life.

INFECTIOUS DISEASE.

There is nothing important to say under this heading as regards school work, though the year was one of great epidemiological interest. Diphtheria was the most serious of the endemic infections and on the whole interfered most with school attendance. Towards the end of the year mumps became very prevalent and interfered greatly with attendance.

FOLLOWING UP.

The whole public health scheme of the Borough is a continuous following up of all children with an automatic arrangement for interviewing such as require it at regular intervals.

CO-OPERATION.

Co-operation between the school medical department and the parents, teachers, attendance officers, and the various agencies which are capable of giving help is satisfactory.

NURSERY SCHOOLS.

There are no Nursery Schools in Swindon.

SPECIAL SCHOOLS.

There is a special school in Swindon for mentally defective children. During the past year 6 children were certified for attendance; 3 children left; and 18 children were in attendance at the end of the year.

SPECIAL DEPARTMENTS.

From what has been said in the introduction it will be understood that the special departments are special to conditions and not to children and that the work of the specialists is brought into co-relation with the general supervision of the children—or at least every attempt is made to do this, though sometimes there are great difficulties to be overcome. The tables at the end of this report tell of the actual work done in each clinic, or depart-

ment, and call for no special commentary. Those conditions treated directly by the full-time staff of the borough and by the specialists definitely employed by the borough cause no difficulty to the scheme of general supervision, but the position is much more difficult with those conditions for which the service itself is not directly responsible, namely, tuberculosis, venereal disease, orthopaedics, and such conditions as are treated by private practitioners, or in hospitals not subject to the municipality. There is no doubt that if we could get all the agencies working together, each fully cognizant of what all the others were doing, much overlapping and waste of energy and expense would be saved and any deficiencies of the service made more clearly manifest and easier to remedy. As things are at present, if anything new or different is asked for, it appears as a new function and an additional expense to the existing machinery, whereas, it is usually merely a more satisfactory method of doing properly what at present is done ill. The cheapest way of dealing with a trouble is to remedy it; the most costly is to ignore it. It is true that neglect apparently relieves rates and taxes, but actually it does no such thing, it simply shifts the expense from a definite category where it can be controlled and scrutinised to diffuse it in other directions.

DUNSTAN BREWER,
School Medical Officer.

March, 1933.

APPENDIX I.

REPORT OF THE SCHOOL DENTAL SURGEON.

Ladies and Gentlemen,

I have pleasure in presenting the Annual Report on Dental Inspection and Treatment for the year 1932.

12 Elementary Schools comprising 26 departments have been dentally inspected, and it was found that 71.6% of the children require treatment.

3,559 children were referred for treatment, and 3,407 children attended the Clinic.

ELEMENTARY SCHOOLS.

6,249 appointments were made, 6,013 or 96.2% were kept.

2,040 teeth were extracted, and 415 were filled.

14,472 other operations (including dressings, scalings, and root treatments) were carried out.

Five regulations were completed by means of regulation appliances.

Four days were occupied by lectures offered by the Dental Board of the United Kingdom. The lectures and demonstrations were given to various groups of children varying in ages from eleven to fourteen years.

The practice of seeing all children up to nine years of age and following up those who accepted treatment is being continued.

The dental nurse was present at practically all the sessions. Her services are greatly valued and appreciated by all.

Casuals (those having no appointment) are seen each morning between 11 and 12 o'clock.

INFANT WELFARE.

375 children were seen from the Infant Welfare Centre, and 52 patients from the Ante-Natal Clinic were treated or given advice.

ROUTINE INSPECTION.

4,970 Children were inspected at the schools.
1,260 or 25.3% were found free from caries.
151 or 3.03% were found to require no treatment.
3,559 or 71.6% were recommended for treatment.
3,407 Children attended at the Clinic.
2,663 were rendered dentally fit.
6,013 attendances were made.

SECONDARY SCHOOLS.

Dental inspection was carried out at the three secondary schools (The College, Euclid Street, and the Commonweal).

791 pupils were examined.

420 or 53.1% were referred for treatment. Treatment is being carried out for this group at present.

239 pupils were treated at the Clinic, making 421 attendances.

92 teeth were extracted.

248 permanent teeth were filled.

223 other operations (including scalings, dressings, root treatment) were carried out.

A detailed account of the result of the dental inspection and treatment will be found in the Statistical Tables for Higher Education.

As in former years, I desire on behalf of the dental staff to thank the teachers, and the nursing and clerical staffs for the assistance they have given us in carrying out our work.

W. KENYON BERRIE, L.D.S., R.F.P.S.G.
School Dental Surgeon.

February, 1933.

APENDIX II.

REPORT OF THE OPHTHALMIC SURGEON.

Ladies and Gentlemen,

The Eye Clinics were held weekly during the school year, and, as in 1931, I had Dr. Logan working with me. This arrangement has entirely abolished the waiting list and there is now no delay in securing treatment for any child who is in need of it.

I referred in my last report to the co-operation which had been established between the School Medical Officers and the Eye Clinic and this has now been further developed, largely owing to the experience which Dr. Logan has had in the actual treatment of eye cases. Some very valuable information has thus been obtained of the results of treatment, which is not otherwise easy to acquire. I am also much indebted to Dr. Brewer and his staff for ensuring that any medical treatment recommended at the Eye Clinic is actually carried out, either by the child's own doctor, or failing this, by the school medical department.

I have treated all cases requiring in-patient treatment at the Oxford Eye Hospital, these being for the most part operations for strabismus, but also including a few more serious conditions such as detached retina, infantile glaucoma and others.

I wish again to record my appreciation of the work of the nursing staff and clerical department and for a considerable measure of help from the teachers.

O. B. PRATT, M.A., M.B., M.R.C.S., L.R.C.P.,
Ophthalmic Surgeon.

March, 1933.

APPENDIX III.

REPORT OF THE AURAL SPECIALIST.

Ladies and Gentlemen,

My report for the Special Aural Clinic, 1932, is as follows :—

The work at the Clinic continued during the year to maintain its standard both as regards the number of patients attending and the variety of conditions for which advice was desired. There was the usual amount of tonsil and adenoid disease to be dealt with, and a rather larger number of consultations concerning nasal catarrh. No special description of the ear cases need be made, but it is reasonable to hope that the more severe conditions will continue to become less frequent as time goes on.

I wish to thank all those who assist me at the Clinic for their courtesy and help.

F. COURTENAY MASON,

B.A., M.B., M.S. (London), F.R.C.S., Eng.

March, 1933.

SUMMARY OF CASES SEEN AT THE SPECIAL AURAL CLINIC, 1932.

Number of Clinics held	10
Number of cases examined	89
Number of consultations at Clinic	104
Number of attendances at Clinic	104

Defects Discovered.

NOSE AND THROAT:

Enlarged tonsils and adenoids	53
Enlarged tonsils only	4
Adenoids only	10
Enlarged glands	23
Nasal catarrh and nasal obstruction	13
Eustachian obstruction	2
Inflation of Eustachian Tubes	2
Deflected Septum	20
Rhinorrhoea and Rhinitis	17
Antral Infection	1
Epistaxis	1

EAR:

Polypi	4
Deafness	1
Otorrhoea	8
Mastoid	1
Labyrinthine irritation	1
Inflamed membranes	1
Thickened, scarred, perforated, indrawn and opaque membranes	19
Tumour of left meatus	1
Drainage of mastoid	1

Operations.

	Recommended.	Performed.	Awaiting operation	Refused.
Tonsils and adenoids ...	53	34	18	1
Adenoids only	8	5	2	1
Removal of Polypus ...	1	1	—	—
Sub-mucous resection...	7	6	—	1
Mastoid	1	1	—	—

REPORT OF ORTHOPAEDIC SURGEON ON DEFECTS DISCOVERED IN SECONDARY SCHOOL CHILDREN.

To the Governors of the Swindon Secondary Schools.

LADIES AND GENTLEMEN,

I beg to present the report from Miss Forrester Brown, Orthopaedic Surgeon, on the examination which she carried out at the Secondary Schools just recently. Copies of the report and the details of individual children will be sent to the Headmasters of the three Secondary Schools.

The report is of considerable importance to us because, though it applies particularly to selected children, the remarks are generally applicable to all. It will be noted that there are very few children who require what may be called medical treatment and that most of the defects noted are preventable and, to a great extent, curable by ordinary gymnastic exercises and attention to such environmental factors as desk accommodation and foot-gear. The last would appear to be the most important, as not only is unsuitable foot-gear responsible for much of the trouble, but it converts gymnastic exercises which are favourable when the foot-gear is suitable, into accessories to augment the trouble caused by the foot-gear itself. The Governors have, of course, no direct power over the foot-gear worn by the children, but it would be quite possible by the combined action of the teachers and the school medical service to introduce reform in the general booting of the child population.

DUNSTAN BREWER,
School Medical Officer.

School Medical Department,
Swindon.

22/2/32.

To Dr. D. Brewer, School Medical Officer,
61, Eastcott Hill, Swindon.

I have examined 56 boys and 3 girls at the College Secondary School, 52 boys and 4 girls at the Commonweal Secondary School, 39 boys and 10 girls at Euclid Street Secondary School, who were referred for diagnosis, and advised treatment where required.

The girls, as a whole, appear to maintain a better posture than do the boys. In many cases, the footwear of the girls is unsuitable, the shoes being too short and too narrow, and many of them are built upon unsuitable lasts. The heels are too high and are of an insufficient area to adequately carry the body weight. The girls should all be encouraged to wear strong laced shoes of the "Oxford" type, with sensible heels.

The footwear of the boys is more satisfactory, but care should be taken that the boot is both long enough and wide enough. The practice of repairing soles and heels with patches of leather is to be deprecated, as, after some time, many of the boots become distorted because of this. Among the younger children the practice of wearing rubber "Wellington" boots is common. These should only be worn, if at all, while journeying to and from school, and should be changed for suitable leather footwear in school.

Where alteration to the boot is advised, it should be done in the following manner:—

> A wedge of leather should be inserted between the layers forming the heel, and between the inner and the outer sole, so that the direction, and not the shape, of the bearing surface is altered. Inner (great toe) side to be raised for flat-foot.

Where recumbency is advised, the child should remain lying down, flat on the back, on a comparatively firm and unyielding surface, for at least half at hour a day, and, if possible, for a longer period, preferably after the mid-day meal.

The few cases in which forms of orthopaedic treatment, other than those indicated here, seem desirable, should first attend the Observation Clinic at 61, Eastcott Hill, where the Assistant Medical Officers can make suitable arrangements for them.

The practice of omitting physical training when preparing for the matriculation examination, is, to my mind, undesirable, and, if further time can be devoted to this without too seriously disturbing the school curricula, I am sure that the results would justify the change. A daily period of physical training is the ideal to be aimed at.

When replacement of desks is required, the provision of desks with separate chairs might be considered by the Committee. The chairs should be of the "Wiltshire" type, which are being entirely supplied for all replacements in the elementary schools of Wilts, Somerset and Dorset. Details can be obtained from the Directors of Education of those counties.

M. FORRESTER-BROWN, M.S., M.D., Lond.
24, Queen Square,
Bath.

TABLE OF DEFECTS AND TREATMENT.

School.	No. of Children examin'd	Defects discovered.		Treatment advised.			To attend Orthopædic Clinic.	No treatment.
		Flat feet	Defective posture	Alterations to footwear	Sp'cial exercises	Recumbency		
The College ..	59	36	34	31	46	3	1	3
The Commonweal	56	33	46	25	48	8	5	—
Euclid Street ..	49	31	36	24	45	2	1	—

ELEMENTARY EDUCATION.

Statistical Tables.

TABLE I.—Return of Medical Inspections

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections:

Entrants	811
Intermediates	887
Leavers	860
Total	2558

Number of other Routine Inspections ... ... Nil

B.—OTHER INSPECTIONS.

Number of Special Inspections	2465
Number of Re-Inspections	7355
Total	9820

TABLE II.—A.—Return of Defects found by Medical Inspection in the Year ended 31st December, 1932.

DEFECT OR DISEASE.	Routine Inspections. No. of Defects.		Special Inspections. No. of Defects.	
	Requiring Treatment.	Requiring to be kept under observation, but *not* requiring Treatment.	Requiring Treatment.	Requiring to be kept under observation, but *not* requiring Treatment.
(1)	(2)	(3)	(4)	(5)
Malnutrition	13	14	44	8
Uncleanliness :	(*See* Table IV., Group V.)			
Skin—				
Ringworm:				
Scalp	2	...	4	...
Body	2	...	21	...
Scabies	3	...	22	...
Impetigo	2	...	71	...
Other Diseases (Non-Tuberculous)...	42	...	374	1
Eye—				
Blepharitis	27	1	24	...
Conjunctivitis	2	...	26	
Keratitis	...	...	1	...
Corneal Opacities	...	...	6	...
Defective Vision (excluding Squint)	133	...	39	10
Squint	17	5	9	2
Other Condition	8	1	130	5
Ear—				
Defective Hearing	42	11	43	4
Otitis Media	19	5	101	38
Other Ear Diseases	64	6	192	44
Nose and Throat—				
Enlarged Tonsils only	16	54	62	68
Adenoids only	5	16	15	2
Enlarged Tonsils and Adenoids ...	6	12	65	1
Other Conditions	28	24	144	45
Enlarged Cervical Glands (Non-Tuberculous)	4	12	88	48
Enlarged Thyroid Gland	79	20	56	2
Defective Speech	3	2	4	1

TABLE II. A.—(Continued).

DEFECT OR DISEASE.	Routine Inspections. No. of Defects. Requiring Treatment.	Routine Inspections. No. of Defects. Requiring to be kept under observation, but *not* requiring Treatment.	Special Inspections. No. of Defects. Requiring Treatment	Special Inspections. No. of Defects. Requiring to be kept under observation, but *not* requiring Treatment.
(1)	(2)	(3)	(4)	(5)
Teeth—Dental Diseases ... ... (*See* Table IV., Group IV.)	339	...	26	...
Heart and Circulation—				
Heart Disease:				
Organic	...	...	...	1
Functional	1	24	...	9
Anaemia	1	1	5	2
Lungs—				
Bronchitis	10	...	7	4
Other Non-Tuberculous Diseases ...	5	6	18	21
Tuberculosis—				
Pulmonary:				
Definite	...	...	1	1
Suspected	...	...	2	4
Non-Pulmonary:				
Glands	2	1	...	...
Spine	1	...	...	...
Hip	...	...	1	...
Other Bones and Joints ...	...	1	1	...
Skin	...	...	...	...
Other Forms	...	...	...	...
Nervous System—				
Epilepsy	...	4	1	2
Chorea	5	1	11	9
Other Conditions	7	10	29	28
Deformities—				
Rickets	4	6	1	1
Spinal Curvature	3	7	13	8
Other Forms	15	15	17	9
Other Defects and Diseases	97	36	717	38

B. Number of INDIVIDUAL CHILDREN found at ROUTINE Medical Inspection to Require Treatment (Excluding Uncleanliness and Dental Diseases).

GROUP.	Number of Children.		Percentage of Children found to require treatment.
	Inspected	Found to require treatment	
(1)	(2)	(3)	(4)
CODE GROUPS :			
Entrants	811	176	21.7
Intermediates	887	219	24.7
Leavers	860	164	19.1
Total (Code Groups)	2558	559	28.8
Other Routine Inspections	—	—	—

TABLE III.—Return of all Exceptional Children in the Area.

			Boys	Girls	Total
Children suffering from the following types of Multiple Defect, *i.e.*, any combination of Total Blindness, Total Deafness, Mental Defect, Epilepsy, Active Tuberculosis, Crippling (as defined in penultimate category of the Table), or Heart Disease			1	3	4
Blind (including partially blind).	(i) Suitable for training in a School for the totally blind.	At Certified Schools for the Blind	2	1	3
		At Public Elementary Schools	...	...	...
		At other Institutions ...	...	...	...
		At no School or Institution	...	...	...
	(ii) Suitable for training in a School for the partially blind.	At Certified Schools for the Blind or Partially Blind...	...	...	...
		At Public Elementary Schools	3	...	3
		At other Institutions ...	...	...	...
		At no School or Institution	...	...	...
Deaf (including deaf and dumb and partially deaf).	(i) Suitable for training in a School for the totally deaf or deaf and dumb.	At Certified Schools for the Deaf	3	...	3
		At Public Elementary Schools	...	...	...
		At other Institutions ...	...	...	...
		At no School or Institution	..	...	..
	(ii) Suitable for training in a School for the partially deaf.	At Certified Schools for the Deaf or Partially Deaf ...	...	...	...
		At Public Elementary Schools	2	...	2
		At other Institutions ...	...	...	...
		At no School or Institution	...	...	...
Mentally Defective.	Feebleminded.	At Certified Schools for Mentally Defective Children	15	3	18
		At Public Elementary Schools	9	1	10
		At other Institutions ...	...	1	1
		At no School or Institution	...	1	1

TABLE III.—(Continued).

			Boys	Girls	Total
Epileptics.	Suffering from severe epilepsy.	At Certified Schools for Epileptics	1	...	1
		At Certified Residential Open Air Schools	...	...	...
		At Certified Day Open Air Schools	...	...	...
		At Public Elementary Schools	...	...	...
		At other Institutions ...	...	1	1
		At no School or Institution	1	...	1
	Suffering from epilepsy which is not severe.	At Public Elementary Schools	7	1	8
		At no School or Institution	...	...	...
Physically Defective.	Active pulmonary tuberculosis (including pleura and intrathoracic glands).	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	...	...	...
		At Certified Residential Open Air Schools	...	...	...
		At Certified Day Open Air Schools	...	...	...
		At Public Elementary Schools	...	...	...
		At other Institutions ...	...	...	...
		At no School or Institution	...	...	...
	Quiescent or arrested pulmonary tuberculosis (including pleura and intrathoracic glands).	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	...	...	...
		At Certified Residential Open Air Schools	...	...	...
		At Certified Day Open Air Schools	...	...	...
		At Public Elementary Schools	8	...	8
		At other Institutions ...	...	...	...
		At no School or Institution	...	...	...

TABLE III.—(Continued).

			Boys.	Girls	Total
Physically Defective —(contd.).	Tuberculosis of the peripheral glands.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	...	...	...
		At Certified Residential Open Air Schools	...	...	...
		At Certified Day Open Air Schools	...	...	...
		At Public Elementary Schools	14	9	23
		At other Institutions ...	..	...	...
		At no School or Institution	1	...	1
	Abdominal tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	...	...	...
		At Certified Residential Open Air Schools	...	...	..
		At Certified Day Open Air Schools	...	...	...
		At Public Elementary Schools	8	4	12
		At other Institutions ...	...	...	...
		At no School or Institution	...	1	1
	Tuberculosis of bones and joints (not including deformities due to old tuberculosis.	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	2	...	2
		At Public Elementary Schools	7	6	13
		At other Institutions ...	...	...	...
		At no School or Institution	2	1	3
	Tuberculosis of other organs (skin, etc.).	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	...	...	...
		At Public Elementary Schools	2	1	3
		At other Institutions ...	...	...	...
		At no School or Institution	...	1	1

TABLE III.—(Continued).

			Boys	Girls	Total
Physically Defective —(contd.).	Delicate Children, i.e., all children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an Open Air School.	At Certified Residential Cripple Schools	...	...	...
		At Certified Day Cripple Schools	...	...	...
		At Certified Residential Open Air Schools	...	...	...
		At Certified Day Open Air Schools	...	...	...
		At Public Elementary Schools	31	41	72
		At other Institutions ...	...	...	...
		At no School or Institution	...	...	...
	Crippled Children (other than those with active tuberculous disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life.	At Certified Hospital Schools	1	...	1
		At Certified Residential Cripple Schools	...	1	1
		At Certified Day Cripple Schools	..	...	...
		At Certified Residential Open Air Schools	...	..	...
		At Certified Day Open Air Schools	...	...	...
		At Public Elementary Schools	10	9	19
		At other Institutions ...	...	...	...
		At no School or Institution	...	2	2
	Children with heart disease, i.e., children whose defect is so severe as to necessitate the provision of educational facilities other than those of the public elementary school.	At Certified Hospital Schools	...	1	1
		At Certified Residential Cripple Schools	...	...	...
		At Certified Day Cripple Schools	...	...	...
		At Certified Residential Open Air Schools	...	...	...
		At Certified Day Open Air Schools	...	..	...
		At Public Elementary Schools	...	...	...
		At other Institutions ...	...	...	...
		At no School or Institution	...	...	...

TABLE III.—(Continued).

Number of Children Suffering from Multiple Defects.

Defect or Disease.	School (if any)	Boys	Girls.
Epileptic and Mentally Defective ...	None	1	–
Blind, Infantile Paralysis, ? Imbecile	None	–	1
Organic Heart Disease and Severe Torticollis	None	–	1
Blind and Epileptic	None	–	1
Total ...	—	1	3

Statement of the number of Children notified during the Year ended 31st December, 1932, by the Local Education Authority to the Local Mental Deficiency Authority.

Total number of Children notified—5.

ANALYSIS OF THE ABOVE TOTAL.

Diagnosis.	Boys.	Girls.
1. (i) Children incapable of receiving benefit or further benefit from instruction in a Special School:		
(*a*) Idiots	—	—
(*b*) Imbeciles	1	—
(*c*) Others	—	—
(ii) Children unable to be instructed in a Special School without detriment to the interests of other children:		
(*a*) Moral defectives ...	—	—
(*b*) Others	4	—
2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16 ...	—	—
3. Feeble-minded children notified under Article 3, *i.e.*, "special circumstances" cases	—	—
4. Children who in addition to being mentally defective were blind or deaf	—	—
Grand Total	5	—

TABLE IV.—Return of Defects Treated during the Year ended 31st December, 1932.

TREATMENT TABLE.

Group I.—Minor Ailments (excluding Uncleanliness, for which see Group V).

DISEASE OR DEFECT.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
Skin—			
Ringworm—Scalp	17	—	17
Ringworm—Body	21	—	21
Scabies	22	—	22
Impetigo	71	—	71
Other Skin Disease	183	—	183
Minor Eye Defects ... ... (External and other, but excluding cases falling in Group II).	179	—	179
Minor Ear Defects, &c.	128	—	128
Miscellaneous ... ... (e.g., minor injuries, bruises, sores, chilblains, etc.)	805	10	815
Total	1426	10	1436

TABLE IV.—(Continued).

Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

DEFECT OR DISEASE.	No. of Defects dealt with.			
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or at hospital apart from the Authority's Scheme.	Otherwise	Total.
Errors of Refraction (including Squint)	577	—	—	577
Other Defect or Disease of the Eyes (excluding those recorded in Group I.)	41	—	—	41
Total	618	—	—	618

otal number of children for whom spectacles were prescribed :

(*a*)	Under the Authority's Scheme	353
(*b*)	Otherwise	—

Total number of children who obtained or received spectacles :

(*a*)	Under the Authority's Scheme	312
(*b*)	Otherwise	2

Group III.—Treatment of Defects of Nose and Throat.

NUMBER OF DEFECTS.

Received Operative Treatment.						Received other forms of Treatment.	Total number Treated.
Under the Authority's Scheme, in Clinic or Hospital for :				By Private Practitioner or Hospital, apart from the Authority's Scheme.	Total.		
Tonsils	Tonsils & Adenoids	Adenoids	Other Conditions				
14	50	15	9	—	88	127	215

TABLE IV.—(Continued).

Group IV.—Dental Defects.

(1) Number of Children who were:—

(a) Inspected by the Dentist:

Routine Age Groups	Aged 3	67	Total	4970
	4	246		
	5	480		
	6	622		
	7	655		
	8	644		
	9	541		
	10	490		
	11	449		
	12	395		
	13	227		
	14	145		
	15	9		
Specials				100
Grand Total				5070

(b) Found to require treatment 3559

(c) Actually treated 3407

(2) Half days devoted to: Inspection 54, Treatment 405 — Total ... 459

(3) Attendances made by children for treatment 6013

(4) Fillings — Permanent teeth 380, Temporary teeth 35 — Total ... 415

(5) Extractions — Permanent teeth 216, Temporary teeth 1824 — Total ... 2040

(6) Administrations of general anæsthetics for extractions 10

(7) Other operations — Permanent teeth 1202, Temporary teeth 13135 — Total ... 14337

Group V.—Uncleanliness and Verminous Conditions.

(i)	Average number of visits per school made during the year by the School Nurses	10
(ii)	Total number of examinations of children in the Schools by School Nurses	28704
(iii)	Number of individual children found unclean	1104
(iv)	Number of children cleansed under arrangements made by the Local Education Authority ...	600
(v)	Number of cases in which legal proceedings were taken:	
	(a) Under the Education Act, 1921	Nil
	(b) Under School Attendance Byelaws	Nil

TABLE V.—Return showing Defects Treated at Minor Ailment Clinic, Year ended 31st December, 1932.

Disease or Defect.	No. of Defects treated under Authority's Scheme			Number of Defects Cured	No. of Defects remaining under Treatment.	No of Attendances at Clinic.	No. of Consultations.
	From previous Year.	New Cases	Total				
Contagious Skin Diseases—							
Impetigo	2	69	71	70	1	640	290
Scabies	...	22	22	22	...	130	88
Non-Contagious Skin—							
Dermatitis	...	3	3	3	...	21	19
Eczema	...	7	7	7	...	154	88
Seborrhoea	...	1	1	1	...	4	4
Pityriasis Rosea	...	3	3	3	...	18	11
Abscesses		5	5	5	...	25	23
Boils	...	22	22	22	..	104	76
Warts	4	11	15	15	...	109	19
Herpes	...	15	15	15	...	73	50
Herpes Zoster	...	1	1	1	...	1	1
Urticaria	...	8	8	8	...	17	11
Psoriasis	...	3	3	3	...	3	3
Alopecia	...	4	4	3	1	17	14
Intertrigo	...	3	3	3	...	18	14
Other Diseases	...	94	94	92	2	319	186
Ear, Nose and Throat Diseases—							
Glands	...	39	39	38	1	104	97
Rhinitis	...	1	1	1	...	1	1
Tonsillitis	...	15	15	15	...	37	37
Other Diseases	...	73	73	72	1	229	176
Wounds and Injuries—							
Injuries, Grazes, &c. ...	...	62	62	62	...	246	191
Bites and Stings	...	36	36	36	..	125	99
Burns, Scalds, Cuts, &c. ...	...	75	75	75	...	540	315
Septic Sores	1	155	156	155	1	1122	592
Bruises and Sprains	...	36	36	36	...	139	104
Others	...	109	109	109	...	406	260
External Eye Diseases—							
Foreign Body	1	16	17	17	...	30	29
Stye	...	43	43	42	1	209	131
Blepharitis	1	22	23	23	...	158	90
Conjunctivitis	3	22	25	22	3	447	340
Corneal Ulcer	...	6	6	6	...	264	188
Strabismus	...	1	1	1	..	1	1
Keratitis	...	1	1	1	...	9	7
Pink Eye	1	18	19	18	1	230	165
Iritis	...	1	1	1	...	42	25
Other Diseases	...	44	44	44	...	96	78

TABLE V.—(Continued).

Disease or Defect.	No. of Defects treated under Authority's Scheme			Number of Defects Cured	No. of Defects remaining under Treatment.	No. of Attendances at Clinic.	No. of Consultations.
	From previous Year.	New Cases	Total				
Infectious Diseases—							
Chicken Pox	1	9	10	10	...	14	14
Whooping Cough	...	4	4	4	...	4	4
Diphtheria	..	5	5	5	..	5	5
Mumps	...	41	41	41	...	62	56
Scarlet Fever	...	1	1	1	...	1	1
Rubella	...	3	3	3	...	8	7
General—							
Ill-health, &c.	...	101	101	101	...	182	153
TOTALS ...	14	1210	1224	1212	12	6364	4053

Total number of Children Treated ... 915

TABLE VI.—Treatment of Defects of Nose, Throat and Ear at Special Clinic.

Number of cases referred for treatment	Number of Consultations	Number of attendances for treatment	DEFECTS.											
			Tonsils considably enlarged	Tonsils enlarged	Tonsils and Adenoids	Adenoids	Tonsillitis	Inflamed Turbinates	Cervical and other Glands	Nasal Spurs, Deflections and obstructions	Rhinorrhoea & Rhinitis	Polypi	Myringitis, Diseases and Perforation of Membranes	Antral Infection
433	1463	1521	45	40	66	17	12	2	77	60	25	5	37	1

DEFECTS (*Continued*)									No. for whom operation for tonsils and adenoids was advised	No. who received operative treatment for tonsils and adenoids	No. of other operations performed	No. of cases cured	No. of cases remaining under treatment or kept under observation	No. of cases for whom no report is available
Mastoid	Discharging ears	Inflamed Membranes	Thickened Scarred and Opaque Membranes	Indrawn Membranes	Deafness (Slight)	Deafness (Severe)	Wax in ears	Other conditions						
1	97	9	41	37	44	—	41	97	99	79	9	311	117	5

TABLE VII.—Electrical Ionisation.

Number of Cases referred for Treatment.	Number of Consultations.	Number of Attendances for Treatment.	DEFECT.	Number of Cases Cured.	Number of Cases still under Treatment or Observation.	Number of Cases for whom no Report is available.
			Discharging Ears.			
17	22	22	17	9	8	—

TABLE VIII.—Treatment of Ringworm.

Number of Cases.			Number of Consultations with Doctor.	Number of Attendances made by Children at Clinic.	Number of Bacteriological Examinations.	Number of Cases cured.	Number of Cases still under Treatment.		Number for which no Report is available
Old.	New.	Total.					Attending School.	Not attending School.	
13	25	38	116	171	18	31	7	—	—

TABLE IX.—Electrical Treatment.

Number of Cases.					Number of Attendances for Treatment.	Disease or Defect.			
Boys.		Girls.		Total		Infantile Paralysis	Paralysis Optic Nerve	Naevus	Warts
Old	New	Old	New						
9	4	6	9	28	325	10	2	15	1

TABLE X.—Summary of School Accidents which occurred during the year 1932. (Elementary School Children).

Number of Cases.			Total number of Attendances made by children at Clinic.	Number of Cases where Treatment was completed at Clinic.	Number of X-Ray Exposures.	Number of Cases referred to Hospital or Private Practitioner for further Treatment.	Number of Cases resulting in Permanent Disability.
Serious	Minor	Total.					
—	175	175	592	165	14	10	

NOTE: Cases of simple fracture not resulting in permanent disability and cuts requiring stitching, however extensive, so long as no permanent injury but a good scar resulted, are included as minor injuries.

TABLE XI.—Showing number of Children discovered at Routine Inspection with Enlargement of the Thyroid Gland. Year 1932.

Group examined.	Number of Children examined.			Number of Children found with enlargement of the Thyroid G'and.		
	Boys	Girls	Total	Boys	Girls	Total
Entrants ...	420	391	811	1	3	4
Intermediates ...	478	409	887	11	20	31
Leavers ...	462	398	860	33	56	89
TOTAL ..	1360	1198	2558	45	79	124

TABLE XII.—Treatment of Enlarged Thyroid at Special Clinic.

Number of Cases.			Number of attendances for treatment.	Number of Consul-tations.	Number of Cases cured.	Number of Cases still under observation and treatment.
Old	New	Total				
46	56	102	423	353	30	72

TABLE XIII.—Bacteriological and Other Examinations carried out during the Year 1932.

Number of Bacteriological examinations	64
Number of Blood examinations—Histological ...	165
Urine—Number of Chemical examinations	12
Number of Microscopical examinations ...	8
Number of X-ray examinations	51

TABLE XIV.—Return of Elementary School Children Medically Examined and found to be Fully Efficient during the years 1925 to 1932.

Year.	UPPER DEPARTMENTS.					INFANTS DEPARTMENTS.					TOTALS.			
	Efficient		Defective		%	Efficient		Defective		%				
	Boys	Girls	Boys	Girls	Efficient	Boys	Girls	Boys	Girls	Efficient	Efficient	Defective	Total examined	% Efficient
1925	428	398	457	499	46	294	278	387	329	44	1398	1672	3070	45
1926	393	318	287	248	57	345	336	273	257	56	1392	1065	2457	57
1927	553	635	373	471	58	321	344	259	242	57	1853	1345	3198	58
1928	785	633	532	513	58	367	394	342	267	56	2179	1654	3833	57
1929	474	361	291	257	60	213	202	152	117	60	1250	817	2067	60
1930	687	633	297	299	69	367	407	212	224	64	2094	1032	3126	67
1931	579	459	243	295	66	363	257	165	145	65	1658	848	2506	66
1932	687	572	240	211	74	356	344	93	73	81	1959	617	2576	76

HIGHER EDUCATION.

Statistical Tables.

Higher Education.

TABLE I.—Number of Children attending the Swindon Secondary Schools inspected during the Year ended 31st December, 1932.

A.—ROUTINE MEDICAL INSPECTIONS.

	AGE GROUPS.									Total.
	11	12	13	14	15	16	17	18	19	
Boys	19	81	116	105	76	73	32	18	9	529
Girls	15	48	56	59	36	43	10	11	1	279
Totals ...	34	129	172	164	112	116	42	29	10	808

B.—OTHER INSPECTIONS.

Number of Special Inspections	401
Number of Re-Inspections	632
Total ...	033

TABLE II.—A.—Return of Defects found by Medical Inspection in the Year ended 31st December, 1932.

Defect or Disease.	Routine Inspections. No. of Defects.		Special Inspections. No. of Defects.	
	Requiring treatment.	Requiring to be kept under observation but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation but not requiring treatment.
(1)	(2)	(3)	(4)	(5)
Skin—				
Ringworm, Body	1	...	...	...
Other Diseases (non-Tuberculous)	7	...	16	...
Eye—				
Blepharitis	8	1	3	...
Defective Vision	69	54	17	8
Squint	2	...	...	...
Other Conditions	3	4	16	...
Ear—				
Defective Hearing	12	2	5	...
Otitis Media	7	4	7	...
Other Ear Diseases	8	3	22	...
Nose and Throat—				
Enlarged Tonsils only	5	1	1	3
Adenoids only	...	...	...	...
Enlarged Tonsils and Adenoids	1	...	6	...
Other Conditions	8	2	5	3
Glands—				
Enlarged Cervical and Sub-max: (non-Tuberculous)	2	...	5	1
Enlarged Thyroid	45	2	...	...
Teeth—				
Dental Diseases	2	...	1	...
Heart and Circulation—				
Heart Disease—Functional ...	7	6	3	4
Anaemia	2	...	...	...
Lungs—				
Bronchitis	1	...	...	...
Other Non-Tuberculous Diseases	1	3	1	1
Nervous System—				
Chorea	1	1	...	...
Other Conditions	15	10	3	1

TABLE II.—A.—(Continued).

Defect or Disease.	Routine Inspections. No. of Defects. Requiring treatment.	Routine Inspections. No. of Defects. Requiring to be kept under observation but not requiring treatment.	Special Inspections. No. of Defects. Requiring treatment.	Special Inspections. No. of Defects. Requiring to be kept under observation but not requiring treatment.
(1)	(2)	(3)	(4)	(5)
Deformities—				
Rickets	...	...	...	...
Spinal Curvature	70	1	3	...
Other Forms	61	17	6	1
Other Defects or Diseases	14	32	85	7

TABLE III.—Summary of Accidents which occurred to Secondary School Children during the Year 1932.

Number of Cases.			Total Number of Attendances made by Children at Clinic.	Number of Cases where Treatment was completed at Clinic.	Number of X-Ray Exposures.	Number of Cases referred to Hospital or Private Practitioner for further Treatment.	Number of Cases resulting in permanent disability.
Serious.	Minor.	Total.					
—	64	64	196	57	12	7	—

NOTE.—Cases of simple fracture not resulting in permanent disability, and cuts requiring stitching, however extensive, so long as no permanent injury but a good scar resulted, are included as minor injuries.

TABLE IV.—Return of Defects Treated during the Year ended 31st December, 1932.

TREATMENT TABLE.

Group I.—Minor Ailments (excluding Uncleanliness).

DISEASE OR DEFECT.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise	Total.
Skin—			
Other Skin Disease	7	—	7
Minor Eye Defects	10	—	10
Minor Ear Defects	—	—	—
Miscellaneous ... ... (e.g., minor injuries, bruises, sores etc.)	79	7	86
Total	96	7	103

TABLE IV.—(Continued).

Group II.—Defective Vision and Squint.

DEFECT OR DISEASE.	No. of Defects dealt with			
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or at hospital apart from the Authority's Scheme.	Otherwise	Total.
Errors of Refraction (including Squint)	146	—	—	146
Other Defect or Disease of the Eyes	4	—	—	4
Total	150	—	—	150

Total number of Children for whom Spectacles were prescribed :

(*a*) Under the Authority's Scheme 72

(*b*) Otherwise ... ... —

Total number of Children who obtained or received Spectacles :

(*a*) Under the Authority's Scheme 70

(*b*) Otherwise ... ... —

Group III.—Treatment of Defects of Nose and Throat.

NUMBER OF DEFECTS.

Received Operative Treatment.			Received other forms of Treatment.	Total number Treated.
Under the Authority's Scheme, in Clinic or Hospital.	By Private Practitioner or Hospital, apart from the Authority's Scheme.	Total.		
Tonsils & Adenoids.				
6	—	6	14	20

TABLE IV.—(Continued).

GROUP IV.—Dental Defects, Dental Inspection and Treatment.

(1) Number of Children who were :—

(a) Inspected by the Dentist :

Age Groups	Aged 11	39	Total	791
	12	129		
	13	152		
	14	148		
	15	109		
	16	124		
	17	60		
	18	22		
	19	8		
Specials				—
Grand Total				791

(b) Found to require treatment 420

(c) Actually treated 239

(2) Half days devoted to : Inspection 10, Treatment 75 } Total ... 85

(3) Attendances made by Children for treatment ... 421

(4) Fillings : Permanent teeth 248, Temporary teeth — } Total ... 248

(5) Extractions : Permanent teeth 50, Temporary teeth 42 } Total ... 92

(6) Administrations of general anæsthetics ... ... —

(7) Other operations : Permanent teeth 127, Temporary teeth 18 } Total ... 145

TABLE IV.—(Continued).

GROUP IV.—Condition of Teeth of Scholars Dentally Inspected at the Secondary Schools during the Year 1932.

THE COLLEGE SECONDARY SCHOOL.

BOYS.

Year of Birth.	Number of Carious Teeth.				Number free from Caries.	Total number examined.
	1	2	3	4		
1913	2	...	...	...	4	6
1914	3	2	1	1	5	12
1915	5	2	1	...	3	11
1916	7	3	...	2	16	28
1917	5	5	1	...	7	18
1918	10	5	...	1	12	28
1919	10	2	1	...	16	29
1920	16	4	1	1	14	36
1921	4	1	...	...	2	7
Totals	62	24	5	5	7	175

GIRLS.

Year of Birth.	Number of Carious Teeth.					Number free from Caries.	Total number examined.
	1	2	3	4	8		
1914	...	...	...	...	...	1	1
1915	2	...	...	...	...	4	6
1916	6	1	...	...	...	5	12
1917	1	3	1	...	...	6	11
1918	6	1	...	1	1	8	17
1919	13	6	1	...	...	5	25
1920	7	2	1	1	...	7	18
1921	2	...	1	...	...	1	4
Totals	37	13	4	2	1	37	94

EUCLID STREET SECONDARY SCHOOL.

BOYS.

Year of Birth.	Number of Carious Teeth.					Number free from Caries.	Total number examined.
	1	2	3	4	5		
1915	...	..	1	...	...	...	1
1916	4	2	1	1	...	6	14
1917	9	3	1	...	...	16	29
1918	6	3	3	...	...	18	30
1919	17	4	1	2	1	17	42
1920	9	8	2	...	2	11	32
1921	3	4	...	...	1	4	12
Totals	48	24	9	3	4	72	160

TABLE IV.—(Continued). Group IV.—(Continued).

EUCLID STREET SECONDARY SCHOOL.

GIRLS.

Year of Birth	Number of Carious Teeth.				Number free from Caries.	Total number examined.
	1	2	3	4		
1916	2	1	...	...	10	13
1917	6	...	1	...	9	16
1918	3	1	1	...	8	13
1919	6	3	3	...	7	19
1920	4	...	3	...	7	14
1921	2	...	...	1	1	4
Totals	23	5	8	1	42	79

THE COMMONWEAL SECONDARY SCHOOL.

BOYS.

Year of Birth.	Number of Carious Teeth.						Number free from Caries.	Total number examined.
	1	2	3	4	5	9		
1913	1	...	...	...	...	...	1	2
1914	...	...	...	...	...	...	3	3
1915	1	1	...	...	...	...	6	8
1916	7	1	2	...	1	...	13	24
1917	6	2	1	1	...	...	13	23
1918	5	5	...	1	...	...	16	27
1919	8	4	...	...	...	...	21	33
1920	14	11	2	2	1	1	9	40
1921	4	4	2	...	...	...	3	13
Totals	46	28	7	4	2	1	85	173

GIRLS.

Year of Birth.	Number of Carious teeth.						Number free from Caries.	Total number examined.
	1	2	3	4	5	6		
1914	...	...	...	...	...	...	5	5
1915	...	...	...	...	...	...	8	8
1916	5	...	...	...	1	...	9	15
1917	4	...	...	...	...	...	10	14
1918	5	4	...	...	...	...	6	15
1919	9	2	1	...	...	...	7	19
1920	6	3	1	2	...	...	7	19
1921	6	3	1	...	...	1	4	15
Totals	35	12	3	2	1	1	56	110

TABLE IV.

GROUP IV.—(Continued).—Summary of Results of Dental Inspection at the Secondary Schools, Year 1932.

Secondary School.	ENTRANTS.		RE-INSPECTIONS.		Total number Inspected.	Total number referred for Treatment.	Number free from Caries.
	Number Inspected.	Number referred for Treatment.	Number Inspected.	Number referred for Treatment.			
The College ...	54	37	215	116	269	153	116
Euclid Street ...	57	40	182	85	239	125	114
The Commonweal ...	77	54	206	88	283	142	141
Totals ...	188	131	603	289	791	420	371

Percentage of Entrants requiring Treatment 69.6
Percentage of Children Re-inspected requiring Treatment 47.9
Percentage of total number of Children inspected requiring Treatment ... 53.1

TABLE V.—Treatment of Enlarged Thyroid at Special Clinic.

Number of Cases.			Number of attendances for treatment.	Number of Consultations.	Number of Cases cured.	Number of Cases still under observation and treatment.
Old	New	Total				
37	36	73	251	229	28	45

TABLE VI.—Bacteriological and Other Examinations carried out during the Year 1932.

Number of Blood examinations—Histological	...			16
Number of X-ray examinations	...	...	...	12