# [Report 1966] / School Medical Officer of Health, Salop / Shropshire County Council.

#### **Contributors**

Shropshire (England). County Council.

# **Publication/Creation**

1966

#### **Persistent URL**

https://wellcomecollection.org/works/vbn8yc5x

#### License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org AC. 4491



# SHROPSHIRE EDUCATION COMMITTEE

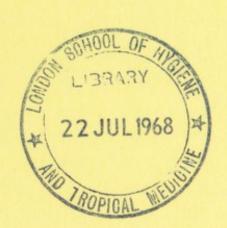
**School Health Service** 

# REPORT

OF THE

Principal School Medical Officer

1966



COUNTY HEALTH DEPARTMENT, SHIREHALL, SHREWSBURY MAY, 1967



https://archive.org/details/b3008765x

# INDEX

|                                       |        | 1      | Page |                                   |       | -     | Page |
|---------------------------------------|--------|--------|------|-----------------------------------|-------|-------|------|
| Area                                  |        |        | 4    | Minor Ailments                    | <br>  |       | 8    |
| Audiology                             |        |        | 23   | Nursery Special School            | <br>  |       | 14   |
| B.C.G. vaccination                    |        |        | 29   | Nutrition                         | <br>  |       | 8    |
| Child Guidance                        |        |        | 28   | Orthodontics                      | <br>  |       | 19   |
| Class for partially hearing children  |        |        | 28   | Orthopaedic defects               | <br>  |       | 7    |
| Cleanliness inspections               |        |        | 8    | Physical education                | <br>  |       | 33   |
| Clinics                               |        | 8, 10, | . 11 | Population                        | <br>  |       | 4    |
| Convalescence                         |        |        | 8    | Pupils on registers               | <br>  |       | 4    |
| Dental Service                        |        |        | 18   | Sanitary circumstances of schools | <br>  |       | 35   |
| Diphtheria immunisation               |        |        | 31   | Schools                           | <br>  | 4     | , 35 |
| Education Committee                   |        |        | 1    | School Nurses                     | <br>  |       | 5, 9 |
| Education in hospitals                |        |        | 10   | School canteens                   | <br>  |       | 34   |
| Employment of school children         |        |        | 9    | School clinics                    | <br>  |       | 10   |
| Eye conditions                        |        |        | 6    | Skin conditions                   | <br>  |       | 7    |
| Foot care                             |        |        | 7    | Smoking and health                | <br>  |       | 33   |
| Foot inspections                      |        |        | 7    | Special Schools                   | <br>  |       | 17   |
| Handicapped children                  |        |        | 12   | Speech therapy                    | <br>  |       | 19   |
| Hearing assessment clinics            |        |        | 27   | Staff                             | <br>2 | 2, 3, | 4, 9 |
| Health Education                      |        | 32,    | 33   | Statistical tables                | <br>  |       | 36   |
| Home visiting of handicapped children |        |        | 16   | Summer camps                      | <br>  |       | 33   |
| Hospital and Specialist Services      |        |        | 11   | Supervision of school leavers     | <br>  |       | 17   |
| Local Health Authority-Children repor | ted to |        | 14   | Tonsil and adenoid cases          | <br>  |       | 6    |
| Mass radiography                      |        |        | 30   | Vaccination against Smallpox      | <br>  |       | 31   |
| Meals                                 |        | 1.5    | 35   | Vaccination against Tuberculosis  |       |       | 29   |
| Medical examination—staff             |        | 34,    | 36   | Vaccination against Poliomyelitis | <br>  |       | 32   |
| Medical inspections                   |        | 4      | 5, 9 | Verminous infestation             | <br>  |       | 8    |
| Milk                                  |        |        | 35   | Welfare Sub-committee             | <br>  |       | 1    |

# To The Chairman and Members of the Shropshire Education Committee

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present the Annual Report of the Principal School Medical Officer for the year 1966.

The work which is detailed in this report has been largely carried out under the supervision of Dr. T. S. Hall, who left the employ of the County Council on 6th November, 1966. I would like to take this opportunity to pay tribute to Dr. Hall whose wise guidance of the School Health Service during his 13 years as Principal School Medical Officer has done so much to make it an efficient and effective service for the well-being of the school population which it serves.

The work of the School Medical Officer is changing; it is broadening in scope. We are concerned with every aspect of the health and welfare of the school child. There is also an increasing emphasis on the needs of the handicapped child and I would recommend for your close perusal the section of the report commencing on page 12 on this subject.

You will see there that the need for early ascertainment is stressed. This is vital in order that any special help, whether it be educational, medical or social, can be provided as indicated. This is particularly the case in children who are born with some impairment of hearing. It is now known that these children will always have some useful residual hearing and the Department of Education and Science now refer to them as Partially Hearing and not as previously Partially Deaf. This residual hearing is the keystone on which the auditory training and speech development of the child are based. The training of these children must commence as early as possible, as the amount of language which the child develops is one of the main features determining its educational placement at school age. The report of the Audiologist on pages 23 to 28, will demonstrate that the audiological services in the County have been effectively developed, and gives an indication of the varied activities carried out in this field of work.

At the end of the section dealing with handicapped pupils is an account of the home visitation that is undertaken by our School Medical Officers. They are expected to pay special attention to these children either in school or by home visiting. One of the most important services we can provide for handicapped pupils and their families is that of counselling. Problems are the rule rather than the exception at all stages in the development of these children. Parents may be

concerned with specific points in relation to the particular disability, or require general advice on the many points which can trouble these families. The ready availability of skilled professional advice is a very real contribution in the help which we give these parents.

I would also like to mention the section of this report which deals with tuberculosis in school children. For eleven years B.C.G. vaccination has been made available to school children aged 13 years and upwards. To-day, tuberculosis in common with other serious conditions such as rheumatic fever and poliomyelitis, has declined greatly in prevalence. Whilst this has been due partly to a decrease in the natural virulence of the organisms concerned there is no doubt that the policy of skin testing and vaccination which has been actively pursued has made a substantial contribution to the drop in the incidence of this disease amongst our school population.

The number of children aged 13 and upwards who are found to be negative on skin testing obviously correlates with the level of tuberculosis infection existing in the community, and the higher the percentage of negative children the less community infection there is. It is interesting to note that in Shropshire the percentage of positive children as determined by skin testing was

```
11.62% (England and Wales 16%) in 1962

10.06% ( ,, ,, ,, 14.9%) in 1963

8.17% ( ,, ,, ,, 12.6%) in 1964

7.27% ( ,, ,, ,, 13.7%) in 1965

6.93% (figures for England and Wales not yet available) in 1966.
```

It will be seen from these figures that the number of children in Shropshire who have come into contact with infection are substantially below the rates for England and Wales. It is difficult to be certain why this should be so; one of the factors may be that we have not a great immigrant population in the County and it is well-known that such people have a high percentage of positive children in their families. But whatever the causes of this, it is a favourable finding.

Turning to environmental health matters, it is also worth while noting the section on page 34 on the staff of the school canteens and the sanitary circumstances of the schools; our concern is with the total school environment of the school child and despite the great interest in the more personal medical services offered, it should be remembered that the observation and checking of the environmental health aspect of school life does not diminish in importance.

From the section of the report devoted to Health Education, pages 32 and 33, it will be seen that demands for illustrated talks on all aspects of health show no sign of abating.

The "Learning to Live" programme is more popular than ever. Health Education is one of the expanding aspects of current public health and school health work. I am certain that this part of our work can usefully and effectively enable our school children to face adult life with confidence.

There are many other interesting points in this report and it is difficult to pick out those of particular merit, as they all have an important bearing on the health of the school population.

Having just taken up office as the Principal School Medical Officer, may I assure the Committee of my great interest in all matters pertaining to the School Health Service. I look forward to continuing the already close co-operation that exists between the Education and Health Departments.

I would like to thank all those who made contributions to this report. I would particularly mention Dr. Crowley, the Department's Senior Medical Officer, who is responsible for the day-to-day administration of the service.

I have the honour to be

Your obedient Servant,

PHILIP C. MOORE

PRINCIPAL SCHOOL MEDICAL OFFICER.

County Health Department
The Shirehall
Abbey Foregate
SHREWSBURY
(Telephone No. Shrewsbury 52211)

# EDUCATION COMMITTEE

#### CHAIRMAN:

CAPTAIN SIR OFFLEY WAKEMAN, Baronet, C.B.E., J.P., D.L.

#### VICE-CHAIRMAN:

LT.-COL. A. P. SYKES, M.B.E., J.P., D.L.

#### ALDERMEN:

BOYNE, DOWAGER THE VISCOUNTESS, C.B.E., J.P., LL.D. DYER, SIR LEONARD, BARONET (Vice-Chairman of Council)
FELL, W. M. W., M.Sc.

HEYWOOD-LONSDALE, LT.-COL. A., M.C., J.P., D.L. (Chairman of Council)
RIDDELL, J. R., M.B.E.
THOMAS, E. B., J.P.

#### COUNCILLORS:

ATTLEE, DR. W. O., J.P. BALDWIN, B.C.
BILLINGSLEY, F. T.
BULLOCK, H. P., J.P.
CHALLINOR, W. C.
CORDINGLEY C. F.
DAWES, W. E.
DUFFIELD, F. L.
GASK, MRS. D. I. P.
HARRISON, MRS. E.
JONES, T. H.
LEE, R.

HAMAR, DR. L. A.

LLOYD, R. A. H.
MAGNUS-ALLCROFT, SIR PHILIP, BARONET, J.P.
MARSH, Mrs. B. E.
PAIN, T. H., J.P.
PILLING, A. M.
POWIS, D. O., J.P.
STRANGE, J.
WEDGE, T.
WHITTINGHAM, E. C. J.
WILLIAMS, A. C.
Vacancy

## CO-OPTED MEMBERS:

AYLING, REV. J. C.
BURROUGHS, PROFESSOR G. E. R.
BUTTREY, T. C., M.B.E.
DYAS, MRS. M. E. M.
MORRIS, V.
PARRY, N.

RAY, Miss A. D., J.P. STORRAR, Mrs. R., J.P. TANSWELL, R. E. WELCH, VERY REV. CANON, T.A. WHITEFORD, W. C.

# EDUCATION (WELFARE) SUB-COMMITTEE

(Responsible, inter alia, for all questions relating to medical inspection and treatment of children and health of children generally)

CHAIRMAN OF COUNCIL
CHAIRMAN OF EDUCATION COMMITTEE
VICE-CHAIRMAN OF EDUCATION COMMITTEE
BILLINGSLEY, F. T.
DUFFIELD, F. L.
HAMAR, DR. L. A.
HARRISON, MRS. E.
JONES, T. H.
LEE, R.

LLOYD, R. A. H. (Chairman)
MARSH, MRS. B. E. (Vice-Chairman)
RAY, MISS A. D.
RIDDELL, J. R.
STORRAR, Mrs. R.
TANSWELL, R. E.
WEDGE, T.
Vacancy

# MEDICAL, DENTAL AND ANCILLARY STAFF

Principal School Medical Officer:

THOMAS S. HALL, M.B.E., T.D., M.D., B.Ch., B.S.c, D.Obst.R.C.O.G., D.P.H. (Retired 6th November, 1966) PHILIP C. MOORE, M.B., B.Ch., B.Sc., D.Obst. R.C.O.G., D.P.H. (Appointed 7th November, 1966)

Deputy Principal School Medical Officer:

\*WILLIAM HALL, M.B., Ch.B., M.R.C.S., L.R.C.P., D.Obst.R.C.O.G., D.P.H.

Senior Medical Officer:

NORA V. CROWLEY, M.B., B.Ch., B.A.O., D.C.H., L.M., D.P.H.

School Medical Officers:

KATHLEEN M. BALL, M.B., B.Ch., B.A.O., D.P.H. (part-time)

AGNES D. BARKER, M.B., Ch.B. (part-time)

JOHN BURROWES, M.B., B.Ch., B.A.O., D.P.H. (Appointed 9th May, 1966)

\*ELIZABETH CAPPER, M.B. Ch.B., D.P.H.

ELIZABETH J. CARTER, M.B., B.S., (part-time) (Appointed 6th October, 1966)

\*Kenneth Cartwright, M.B., Ch.B., D.P.H.

SHEILA M. G. CROSLAND, M.B., B.S. (part-time) (Appointed 3rd October, 1966) JOAN B. DEACON, M.R.C.S., L.R.C.P. (part-time)

Moira Fordyce, M.B., Ch.B. (part-time) (Appointed 10th March, 1966) (Resigned 15th June, 1966)

ISABELLA L. H. HEWLETT, M.D., B.S., M.R.C.P., M.R.C.S., (part-time) KENNETH E. JONES, M.B., Ch.B., D.P.H.

FLORA MACDONALD, M.B., B.S., D.P.H. (Resigned full-time 30th September, 1966) (Appointed part-time 1st October, 1966)

\*ALISTAIR COLIN MACKENZIE, M.D., Ch.B., D.P.H.

\*Douglas R. McCaully, M.D., B.A., B.Ch., B.A.O., D.P.H.
\*WILLIAM MOORE, M.B., B.Ch., B.A.O., D.R.C.O.G., D.T.M.H., D.P.H. MURIEL NANKIVELL, M.B., Ch.B. (part-time) (Appointed 8th December, 1966)
ALICE N. O'BRIEN, M.B., Ch.B., D.P.H.
ELIZABETH R. POLLAND, L.R.C.P., L.R.C.S., L.R.F.P.S. (part-time)
\*SAMUEL SMITH, M.B., Ch.B., D.P.H.

JOAN P. H. THOMPSON, M.R.C.S., L.R.C.P. (part-time) \*MARGARET H. F. TURNBULL, M.B., Ch.B., D.P.H.

ELIZABETH A. WELTON, M.B., Ch.B. (part-time) (Appointed 24th June, 1966)

Principal Dental Officer:

CHARLES D. CLARKE, L.D.S.

School Dental Officers:

Whole-time:

GEOFFREY G. FIELD, L.D.S. NOEL GLEAVE, L.D.S. PETER HOWE, L.D.S. GEORGE B. WESTWATER, L.D.S.

Part-time:

PATRICIA R. ABBOTT, B.D.S. HARRY B. KIDNER, L.D.S. (Resigned 30th November, 1966) ALEXANDER J. LAVELLE, L.D.S., R.F.P.S. (Appointed 2nd November, 1966) REGINALD H. N. OSMOND, L.D.S. JEAN W. PATTISON, L.D.S.

\*Also District Medical Officer of Health

# Consultant Orthodontists (part-time)

BRIAN T. BROADBENT, F.D.S. MICHAEL F. SCOTT, L.D.S.

# Anaesthetists (part-time):

MICHAEL ELDER, M.B., B.Ch. (Appointed 14th April, 1966) HENRY A. JOHNSON, M.B., Ch.B., M.R.C.S., L.R.C.P. JAMES J. POLLAND, L.R.C.P., L.R.C.S., L.R.F.P.S. FREDA WHITNEY, M.B., Ch.B. (Appointed 4th July, 1966)

#### Dental Technicians:

NORMAN J. RUSHWORTH CLIVE EVERINGHAM

## Apprentice Dental Technician:

Mark Mason (Resigned 31st August, 1966) Mark J. Davies (Appointed 1st September, 1966)

#### Dental Auxiliaries.

PAMELA A. UPTON (Resigned 31st December, 1966) JUDITH C. POLLITT (Appointed 1st September, 1966)

#### Dental Hygienists:

MARY HATFIELD (Resigned 28th February, 1966) NANCY SMITH

#### Consultant Children's Psychiatrist (part-time):

DAVID R. BENADY, M.B., B.S., M.R.C.S., L.R.C.P., D.C.H., D.P.M.

## Educational Psychologists:

JOHN L. GREEN, B.A. DAVID R. JONES, B.Sc.(Hons.), Teacher's Diploma MARGARET THOMAS, B.A. (part-time)

# Senior Psychiatric Social Worker:

BRIDGET C. DOWNER, Diploma in Social Studies (London), Certificate in Psychiatric Social Work (Edinburgh), (Appointed 1st November, 1966)

#### Child Guidance Social Workers:

BETTY BOYCOTT, Social Science Diploma (London) RITA M. GARRARD, Social Science Diploma (London)

# Audiologist Senior Speech Therapist:

EDWARD PAULETT, L.C.S.T., Dip.Aud.

#### Audiometrician:

JOAN ROBINSON (Appointed 1st July, 1966)

# Speech Therapists:

ELIZABETH M. CASWELL, L.C.S.T. (Appointed 1st September, 1966) CYNTHIA M. MAUGHAN, L.C.S.T. (part-time) MARJORY M. SHELDON, L.C.S.T. (part-time) (Appointed 9th May, 1966) CYNTHIA D. WAGG, L.C.S.T.

#### Physiotherapists:

CLARICE D. E. DUFFY (part-time)
ANNE GUY (part-time) (Appointed 7th December, 1966)
PAMELA NEELY (part-time) (Resigned 17th June, 1966)

#### Consultant Chest Physician (part-time):

ARTHUR T. M. MYRES, B.A., B.M., B.Ch., M.R.C.P. M.R.C.S., L.R.C.P.

# Report for the year 1966

# GENERAL

The area covered by the Local Education Authority comprises 861,800 acres; and in June, 1966, the home population, as estimated by the Registrar-General, was 321,720, an increase of 4,450 compared with 1965.

The number of pupils on the school register in 1966 was 50,838, compared with 49,697 in the previous year—an increase of 1,141.

At the end of the year, there were in the County of Salop, including the Borough of Shrewsbury, the following schools:

| Non-Residentia | 1:       |       |        |       | Schools | Departments | Pupils on Register |
|----------------|----------|-------|--------|-------|---------|-------------|--------------------|
| Nursery Spec   | cial Sch | ool   |        |       | <br>1   | 1           | 36                 |
| N              |          |       |        |       | <br>3   | 3           | 120                |
| Primary (Cou   | inty)    |       |        |       | <br>81  | 81          | 15,563             |
| Primary (Vol   | untary)  |       |        |       | <br>154 | 154         | 14,799             |
| Secondary M    | lodern ( | Cour  | ity)   |       | <br>25  | 25          | 10,458             |
| Secondary M    | lodern ( | Volu  | ntary) |       | <br>2   | 2           | 903                |
| Secondary G    | ramma    | r (Co | unty)  |       | <br>8   | 8           | 3,911              |
| Secondary G    |          |       | untary | )     | <br>5   | 5           | 1,772              |
| Comprehensi    | ve (Co   | inty) |        |       | <br>4   | 4           | 2,901              |
| Residential:   |          |       |        |       |         |             |                    |
| Secondary      |          |       |        |       | <br>1   | 1           | 127                |
| Canonial       |          |       |        |       | <br>3   | 3           | 184                |
| Hospital       |          |       |        |       | <br>1   | 1           | 64                 |
|                |          |       |        | TOTAL | <br>288 | 288         | 50,838             |
|                |          |       |        |       |         |             |                    |

The table below shows the establishment of principal posts in the School Health Service and the staffing position at 31st December, 1966:

| g position at 31st December, 1700.                              |      |      | Est  | ablishment | Staff at<br>31st Dec., 1966 |
|---|------|------|------|------------|-----------------------------|
| Principal School Medical Officer                                |      |      | <br> | 1          | 1                           |
| Deputy Principal School Medical Officer                         |      |      | <br> | 1          | 1                           |
| Senior Medical Officer  |      |      | <br> | 1          | 1                           |
| Administrative Medical Officer                                  |      | 1.10 | <br> | 1          | 1                           |
| School Medical Officers—whole-time part-time                    |      |      | <br> | 12         | { 3<br>18                   |
| Principal School Dental Officer                                 | **** |      | <br> | 1          | 1                           |
| Dental Officers—whole-time —part-time                           |      |      | <br> | 11         | { 4<br>4                    |
| Dental Auxiliaries Orthodontists—whole-time)                    |      |      | <br> | 4          | , 2                         |
| —part-time ) · · · · ·  |      |      | <br> | 1          | 2                           |
| Dental Hygienist  |      |      | <br> | 2          | 1                           |
| Dental Technician   |      |      | <br> | 2          | 2                           |
| Apprentice Dental Technician                                    |      |      | <br> | 1          | 1                           |
| Senior Dental Surgery Assistant                                 |      |      | <br> | 1          | 1                           |
| Dental Surgery Assistants—whole-time part-time                  |      |      | <br> | 12         | {10<br>3                    |
| Audiologist/Senior Speech Therapist Speech Therapist—whole-time |      |      | <br> | 1          | 1                           |
| —part-time  |      |      | <br> | 5          | 1                           |
| Physiotherapists—whole-time —part-time                          |      |      | <br> | 2          | { - 2                       |
| Audiometrician  |      |      | <br> | 1          | 1                           |

Inclusive of the Principal School Medical Officer and his Deputy, the total medical staff undertaking all School Health Service duties, including administrative work, on 31st December, 1966, was equivalent to approximately 8\frac{1}{3} whole-time officers.

The nursing staff employed in the School Health Service at the end of 1966 was 4 whole-time and 9 part-time School Nurses, while part-time service was also rendered by 24 full-time Health Visitors and 26 District Nurse-Midwives who were employed by the Local Health Authority.

# MEDICAL INSPECTION AND TREATMENT

Routine Medical Inspections.—Section 48 of the Education Act, 1944, requires the Local Education Authority to provide for the medical inspection, at appropriate intervals, of all pupils in attendance at maintained schools, including County Colleges. This Section also requires parents to submit their children for such inspection when so requested by an authorised officer of the Authority.

Under the National Health Service Act, 1946, children can receive treatment from medical practitioners who have contracted with the Local Executive Council to provide general medical services; and children found on examination by a School Medical Officer to be suffering from any defect are, save for certain agreed conditions, referred to their own doctors. Such pupils are followed up by the School Nurses and any necessary specialist advice or treatment is arranged either through the family doctor or directly with one or other of the hospitals in the area of the Birmingham Regional Hospital Board, as listed on page 12.

Local Education Authorities have power to modify medical inspection procedure by discontinuing certain routine examinations and arranging instead for the examination of children selected not by age but by other criteria, such as lack of physical or educational progress, high rate of absenteeism or from lists drawn up by the Head Teacher, School Medical Officer and School Nurse in consultation.

In this County the following procedure obtains:

# (i) Routine Inspections:

Routine medical examinations are carried out of pupils in three age groups (a) Entrants—on admission to school, usually 5 years, (b) Intermediates—at 11 years, and (c) Leavers—at approximately 14 years.

School Nurses are asked to visit each school prior to the inspection to test the vision of all children listed for examination.

Routine examination of the 8 year olds has been dispensed with but all pupils noted for reexamination on account of a defect and any referred for special examination by the Head of the school are seen by the examining Medical Officer once a year. Heads are encouraged to refer children in this age group for special examination because of the six years interval between the "Entrant" and "Intermediate" routine examinations.

There were approximately 50,000 pupils on the School Register in 1966, with about one-third due for routine examination. The number having routine examination was, in fact, 12,096. In an area the numbers examined vary with the numbers of the Medical Officers employed, and the other demands made upon their time. In several areas there was difficulty in replacing immediately Medical Officers who resigned during 1966. Vaccinations, immunisations, health education talks and an increasing amount of audiology, which is a very valuable service, reduce time available to Medical Officers for routine medical inspection purposes.

# (ii) Special Inspections and Re-Examinations:

In addition to the inspection of pupils in the three age groups mentioned in Section (i) above, special examinations are made of pupils referred on account of defects by Head Teachers or School Nurses, including children who are in need of special educational treatment. Annual re-examinations are also made of children found to have a defect requiring observation.

The numbers of pupils examined as specials and re-examinations in 1966 were 1,603 and 10,535 respectively, making a total of 12,138 examinations.

Co-operation and Co-ordination—Good co-operation exists between School Medical Officers, School Nurses and Family Doctors and this results in a better service for the children. Head teachers are very co-operative in all aspects of School Health Service work and they are particularly helpful at annual routine school medical inspections which sometimes cause inconvenience to the normal teaching programme.

There is close liaison with N.S.P.C.C. Inspectors and Education Welfare Officers in helping children from unsatisfactory homes, or securing attendance of pupils for special examinations.

Appreciation is acknowledged of the help given by the Shrewsbury Branch of the British Red Cross Society in providing escorts to accompany handicapped children travelling to and from Convalescent Homes.

Treatment of Eye Conditions.—All children in the five year old group are tested with special material shortly after entry to school in order that visual defects may be detected and rectified as formal education begins. Children found to have visual defects, even as slight as 6/9 in one or both eyes without spectacles, are "followed up" at three monthly intervals by the School Nurse and if the vision subsequently deteriorates they are referred to the School Medical Officer who will if necessary, refer the patient to an Ophthalmic Consultant. All pupils suffering from defective vision are in any case seen by the School Medical Officer as annual re-examinations as mentioned in section (ii) above. Children thought to be suffering from squint are being referred at a much earlier age with correspondingly more satisfactory results after treatment. Colour vision is tested at the age of 11 years by means of special material.

During the year 4,874 children were dealt with for defective vision or other eye conditions, 4,525 being referred to Ophthalmic Medical Practitioners or Ophthalmic Opticians, and 349 being treated by Ophthalmic Consultants at the Shrewsbury Eye, Ear and Throat Hospital.

Of the 13,699 pupils examined by School Medical Officers 43 were noted as having had squint operations during the year, and 65 to be receiving orthoptic exercises; 59 other pupils were referred for specialist treatment on account of squint; and 275 were noted for observation for the same condition.

Defects of Ear, Nose and Throat.—These conditions have, with respiratory illnesses, changed in character and incidence over the last twenty years and less surgical treatment is needed in this field.

Of the 13,699 children medically examined by the School Medical Officers, 44 were referred to the Ear, Nose and Throat Specialists during 1966, and another 1,209 were noted for observation on account of tonsil and adenoid conditions.

Operations for the removal of tonsils and adenoids were performed on 432 Shropshire school children in hospitals of Nos. 15 and 16 Hospital Management Committee Groups. This number includes children attending private and independent schools not maintained by the Local Education Authority and who are, therefore, outside the scope of the School Health Service.

Orthopaedic Defects.—There are seven Orthopaedic After-Care Clinics in Shropshire attended by an Orthopaedic Specialist and an Orthopaedic Nurse.

During 1966, of 13,699 pupils medically examined by the School Medical Officers, the following were noted as suffering from varying degrees of orthopaedic defect and referred to the Orthopaedic Surgeon where treatment was considered necessary:

|          |         |     | Treatment | Observation |
|----------|---------|-----|-----------|-------------|
| Posture  |         |     | 2         | 80          |
| Feet     |         |     | 37        | 513         |
| Other Co | onditio | ons | 27        | 355         |

Defects of posture or feet account for an appreciable number of orthopaedic defects and during the year 22 pupils were found by School Medical Officers to be receiving corrective exercises by Physical Education Specialists in schools.

During Health Education talks and at school medical inspections emphasis is placed upon the need for suitable footwear. Parent guidance is most essential in this field.

Diseases of the Skin.—The numbers of Shropshire school children known to have been treated during 1966 for diseases of the skin (other than of the feet) are indicated below:

| Ringworm   |          |      | <br>2  |
|------------|----------|------|--------|
|            | —body    |      | <br>11 |
| Scabies    |          |      | <br>6  |
| Impetigo   |          |      | <br>18 |
| Other skir | diseases | 3    | <br>42 |
|            | Т        | OTAL | <br>79 |
|            |          |      |        |

Care of the Feet.—During 1966, the School Medical Officers carried out 30 special foot inspections involving 11,288 pupils and 374 cases of verruca (137 already having treatment and 237 which had not been diagnosed) were discovered. In addition, School Medical Officers found 620 cases of suspected Athlete's Foot (53 under treatment and 567 undiagnosed) together with 140 other foot conditions.

Head teachers are asked to report any cases of suspected Verruca occurring amongst pupils in their schools in order that School Nurses may examine these pupils and where necessary refer them to School Medical Officers at the Child Welfare Centres.

Children found on inspection to have Verruca are excluded from swimming, showers and participation in bare foot physical education until the condition has been treated and cured. Cases discovered are referred to the family doctor concerned and kept under observation by the School Nurse who also ensures that treatment is carried out.

Particular attention is paid in schools to the most likely spots for the spread of infection, e.g. gymnasium floors, swimming baths, etc., and these are disinfected.

Treatment of Minor Ailments.—Since the introduction of the National Health Service Act in 1948, minor ailment clinics do not play a large part in school work, because most of the conditions which could be seen at such clinics are dealt with by the family doctor. Some minor ailment clinic facilities are in fact still offered at child welfare clinics.

At the "School Nurse" session and the "School Doctor" sessions at Bridgnorth, Market Drayton, Oswestry and Wellington Welfare Centres, 65 children made 100 attendances in 1966. Examinations by the School Doctor totalled 20 and 17 of the children were referred to their own doctor.

Nutrition.—General improvement in the satisfaction of material requirements has reduced physical ailments to a minimum and in the post war years there has been a steady improvement in the physical standard and nutrition of children in maintained schools. The nutrition figure which attained 100% in 1961 has since remained at that level. In a few cases satisfactory nutrition has been followed by obesity and School Medical Officers at medical inspections advise children and parents about diet.

Convalescence.—On the recommendation of School Medical Officers, 10 pupils were provided with free holiday convalescence during 1966. Selected cases were those where rest, good food and fresh air were essential to recovery and generally these children came from poor or problem homes. If a fairly long period of treatment is required, the child is regarded as a delicate pupil and placed in an Open Air School.

Holidays, usually of a few weeks duration, were arranged for the 10 children concerned through the School Health Service and under a scheme quite distinct from the convalescence facilities provided through the National Health Service normally used for adult patients.

Cleanliness Inspections.—School Nurses carry out routine inspections for verminous infestation of pupils in all Primary Schools, follow-up inspections being made of pupils found to have nits or lice. Such inspections in Secondary Modern and Grammar Schools are now arranged only at the request of the Heads.

Following cleanliness inspections in Primary Schools early each term, an Informal Cleansing Notice is issued to the parent of any pupil found to be verminous. Such pupils are re-examined one week later. If still found to be verminous, Formal Cleansing Notices are served on the parents, requiring them to disinfest and to present the children for re-examination by the School Nurse at the end of three days. If at this latter re-examination a pupil is found to be still verminous, a Formal Cleansing Order may be issued from the School Health Office instructing the Nurse to convey the pupil to the nearest School Clinic to be cleansed by her.

During 1966, a total of 101,252 head inspections was carried out by the School Nurses, and of the 38,916 pupils on the registers of schools inspected 1,048 children were found to be verminous, some on more than one occasion. This represented a figure of 2.6 per cent of the school population who were found to be verminous during the year.

It was found necessary during the year to issue 32 Formal Cleansing Notices and 14 Cleansing Orders. No legal proceedings were instituted in this connection during the year.

Infestation is mainly confined to children whose home conditions are unsatisfactory. In such cases School Nurses have the task of dealing with parents and older members of the household, who neglect personal hygiene and consequently re-infest the younger children.

Work of School Nurses.—School Nursing is undertaken by 13 School Nurses (4 whole-time and 9 part-time), 24 Health Visitors and 26 District Nurses (who are estimated to devote about 7 per cent of their time to this work). In addition to visits to schools for head inspections, the School Nurses attend routine medical inspections. Children ascertained by the School Medical Officers to be suffering from defects of any kind are either referred to the family doctor for treatment or noted for observation; and the subsequent follow-up work of the School Nurses, together with the number of days given to routine medical inspections, is indicated in the following table:

|   | Sta           | aff                  |                         |                     |                   |                       |                       |                   |                   |                   |                       |                       |
|---|---------------|----------------------|-------------------------|---------------------|-------------------|-----------------------|-----------------------|-------------------|-------------------|-------------------|-----------------------|-----------------------|
| Staff   | Number        | Whole-               | Medical                 |                     | Treatme           | nt Cases              |                       | Obs               | servation         | Totals            |                       |                       |
| Staff   | Number        | equiva-<br>lent      | Inspec-<br>tion<br>days | Visited             | Not<br>Visited    | Total                 | Treated               | Visited           | Not<br>Visited    | Total             | Cases                 | Visits                |
| School Nurses<br>Part-time                          | 4             | 4                    | 118                     | 1,424               | 188               | 1,612                 | 1,612                 | 175               | 51                | 226               | 1,838                 | 2,810                 |
| School Nurses<br>Health Visitors<br>District Nurses | 9<br>24<br>26 | 3.22<br>6.72<br>1.82 | 116<br>226<br>66        | 896<br>1,037<br>367 | 846<br>641<br>125 | 1,742<br>1,678<br>492 | 1,742<br>1,678<br>492 | 364<br>504<br>153 | 403<br>479<br>123 | 767<br>983<br>276 | 2,509<br>2,661<br>768 | 1,735<br>1,744<br>629 |
| TOTAL   | 63            | 15.76                | 526                     | 3,724               | 1,800             | 5,524                 | 5,524                 | 1,196             | 1,056             | 2,252             | 7,776                 | 6,918                 |

Employment of Children.—In accordance with the provisions of Section 59 of the Education Act, 1944, all pupils reported by the Chief Education Officer as being engaged in work outside school hours are examined by a School Medical Officer to ensure that they are not being employed in a manner likely to be prejudicial to health or to render them unfit to obtain the full benefit of education.

After this initial examination, each child is seen annually at routine medical inspection, or at an earlier date if the School Medical Officer recommends such an arrangement.

Only children of 13 years or more are allowed to take up employment, which is restricted by statute and may not exceed two hours on school days. Work before 7 a.m. is prohibited. Employment in a number of occupations connected with hotels, public entertainments, licensed premises, racing tracks, etc., is prohibited and no child may be employed to lift, carry or move anything so heavy as to be likely to cause him injury.

Experience shows that part-time work is in no way harmful to most children; it gives them a sense of responsibility and acts as an introduction to full-time employment.

Of 630 pupils examined during 1966, one was unfit for employment and it was necessary to recommend re-examination in three further cases at intervals ranging from one to nine months.

Medical Inspection of Pupils resident in Boarding Schools and Special Boarding Schools.— Special arrangements are made for the medical examination of children in boarding schools or resident in special boarding schools within the County, as under:

Bridgnorth .. Apley Park
Ellesmere .. Petton Hall
Shifnal .. .. Haughton Hall
Wem .. . Trench Hall

During 1966, School Medical Officers examined 311 pupils in residence, anything relevant to the well-being of the children being passed on to the Head of the school. Every pupil in these residential establishments is on the list of a local Medical Practitioner providing General Medical Services under the National Health Service Act.

Arrangements were also made during the year, at the request of the Robert Jones and Agnes Hunt Orthopaedic Hospital authorities, for the local School Medical Officer to undertake vision tests of 64 pupils attending the Hospital School. These tests are carried out each term and pupils having defective vision are referred to an Ophthalmic Consultant for treatment.

Education of Children in Hospitals.—The Robert Jones and Agnes Hunt Orthopaedic Hospital have a permanent arrangement with the Education Committee for the provision of special educational facilities. At Copthorne Hospital, Shrewsbury, patients recommended for special tuition attend a class regularly at the hospital by a tutor provided by the Education Committee.

In other hospitals in the County, when a child is admitted whose stay is likely to be prolonged, special arrangements are made for individual tuition if the medical condition permits.

# SCHOOL CLINICS PROVIDED BY THE LOCAL EDUCATION AUTHORITY

The following is a list of clinic sessions made available by the Local Education Authority at which school children may attend. School doctors' sessions operate concurrently with general child welfare clinics. In addition to the clinics listed, there are two Mobile Dental Units which operate in the north and south of the County respectively. The times at which clinics are held are liable to be modified, but up-to-date information on clinic sessions may be obtained from the Health Department, Shirehall, Shrewsbury, or from the School Medical Officer concerned at local level.

#### List of School Clinics as at 1st March, 1967

| Medical Officer<br>and District | Centre  | Frequency of Sessions   |
|---------------------------------|---|---|
| Dr. Barker<br>Wem               | Wem   | <br>Audiology As required Dental Two sessions weekly  |
| Dr. Capper<br>Ludlow            | Bishop's Castle<br>Church Stretton<br>Cleobury Mortimer<br>Ludlow | Audiology As required Audiology As required Audiology As required Audiology   |
| Dr. Cartwright<br>Dawley        | Dawley  | <br>Audiology One session monthly Dental Five sessions weekly Speech Therapy . One session weekly   |
| Dr. Crosland<br>Madeley         | Madeley   | <br>Audiology As required Dental Three sessions weekly Orthopaedic Two sessions monthly Speech Therapy One session weekly   |
| DR. McCaully<br>Market Drayton  | Hadley<br>Hadley Modern School<br>Market Drayton                  | <br>Audiology As required School Doctor One session monthly Speech Therapy One session weekly Audiology As required Child Guidance One session monthly Dental Four sessions weekly School Doctor One session weekly |

| Medical Officer<br>and District | Centre  | Frequency of Sessions  |
|---------------------------------|---|--|
| Dr. Burrowes<br>Wellington      | Oakengates  | Audiology As required Dental As required Audiology One session weekly Child Guidance . Five sessions weekly Dental Eight sessions weekly School Doctor . One session weekly Speech Therapy . One session weekly  |
| DR. MACKENZIE<br>Shrewsbury     | 1, Belmont  | Audiology Two-three sessions weekly Speech Therapy   |
| DR. O'BRIEN<br>Newport          | Albrighton Junior School Albrighton County Infants School Newport Shifnal | Audiology As required Speech Therapy . Three sessions weekly Audiology As required Dental Four sessions weekly Audiology As required   |
| Dr. Moore<br>Oswestry           | Oswestry  | Audiology As required Child Guidance . One session monthly Dental Five sessions weekly Ophthalmic Two sessions monthly Orthopaedic . One session weekly School Doctor . One session weekly School Nurse's Session Speech Therapy . Three sessions weekly |
| Dr. Smith                       | Ellesmere Whitchurch  | Audiology As required Dental Four sessions weekly Audiology . As required Dental Five sessions weekly Speech Therapy . One session weekly  |
| DR. TURNBULL<br>Bridgnorth      | Bridgnorth (Northgate)  | Audiology One-two sessions monthly Child Guidance One session monthly Dental Five sessions weekly School Doctor . One session monthly Speech Therapy . One session weekly Audiology As required  |

# HOSPITAL AND SPECIALIST SERVICES

Children found to be suffering from defects requiring either the advice of a Consultant or in-patient treatment are referred, preferably in collaboration with their family doctor, to the following hospitals, all of which come under the Birmingham Regional Hospital Board. Children suffering from chest conditions are seen by a Chest Physician at one of the Chest Clinics.

# General Medical and Surgical Conditions:

The Royal Salop Infirmary, Shrewsbury

Copthorne Hospital, Shrewsbury

The North Staffordshire Royal Infirmary, Stoke-on-Trent The Kidderminster and District General Hospital, Kidderminster

The Wolverhampton Royal Hospital, Wolverhampton

The Staffordshire General Infirmary, Stafford

#### Eve Conditions:

The Eye ,Ear and Throat Hospital ,Shrewsbury

The North Staffordshire Royal Infirmary, Stoke-on-Trent

The Staffordshire General Infirmary, Stafford

The Kidderminster and District General Hospital, Kidderminster

The Wolverhampton and Midland Counties Eye Infirmary, Wolverhampton

#### Ear, Nose and Throat Conditions:

The Bridgnorth and South Shropshire Infirmary, Bridgnorth

Copthorne Hospital, Shrewsbury

The Eye, Ear and Throat Hospital, Shrewsbury

Ludlow and District Hospital ,Ludlow

Oswestry and District Hospital, Oswestry

Shifnal Cottage Hospital, Shifnal

Whitchurch Cottage Hospital, Whitchurch New Cross Hospital, Wolverhampton

The North Staffordshire Royal Infirmary, Stoke-on-Trent

The Staffordshire General Infirmary, Stafford

The Kidderminster and District General Hospital, Kidderminster

The Wolverhampton Royal Hospital, Wolverhampton

## Orthopaedic Conditions, including Fractures:

Royal Salop Infirmary, Shrewsbury

The Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry

The Kidderminster and District General Hospital, Kidderminster

#### X-ray Treatment of Ringworm:

The Midland Skin Hospital, Birmingham

#### Special Forms of Treatment not elsewhere available:

The Birmingham Children's Hospital, Birmingham

#### HANDICAPPED CHILDREN

Case-finding of Handicapped Pupils.—A handicapped pupil may be defined as one suffering from a disability of mind or body which is likely to interfere with normal growth, development and ability to learn.

The Education Act, 1944, imposed upon Local Authorities the duty of finding children who require special educational treatment and of providing this, if necessary, from the age of two years.

For the purposes of the Education Act there are ten categories of handicap:

Blind

Partially sighted

Deaf

Partially Hearing

Delicate

Educationally Subnormal

Epileptic

Maladjusted

Physically Handicapped

Speech Defective

**Detection and Ascertainment.**—The need for early discovery must be stressed and parents, family doctors, school medical officers, health visitors and teachers should refer any child thought to be suffering from a handicap so that assessment and any special educational treatment or training may be decided upon without delay.

Two registers are maintained in the School Health Service Section—a "Register of Handicapped Pupils" and an "At Risk" Register, the latter giving details of all children in whom the possibility of deafness caused by adverse influences in the pre-natal and post-natal periods is considered to be the greatest, e.g. premature infants, twins, children of mothers who have had a virus infection during pregnancy, etc. These "At Risk" categories are referred to again on page 24 of this report. Consultant Paediatricians advise the School Health Service about any handicapped children who are under their care.

During 1966 pupils ascertained under the provision of the Handicapped Pupils and School Health Service Regulations numbered 458—312 by School Medical Officers and 146 by the Consultant Psychiatrist, and a summary of the findings and recommendations to the Local Education Authority is given below. In addition 273 children found to be speech defective were brought under treatment by the Speech Therapist, whilst a further 1,150 children were found at the Medical Audiology Clinics to have defective hearing as a result of which recommendations and referrals were made in 648 of these cases.

#### HANDICAPPED PUPILS

|                            |       |                      | Tem- | Speci                                 | al Educa<br>nt Recon | tional<br>nmended        |                         | ed to Local<br>Authority | Pupils not<br>requiring<br>super-  | Under  |                                |                                 |
|----------------------------|-------|----------------------|------|---------------------------------------|----------------------|--------------------------|-------------------------|--------------------------|------------------------------------|--|--------------------------------|---------------------------------|
| Category                   | Ex-   | Specially Handi- fro |      | Not exclusion In<br>Handi- from Ordin |                      | In<br>Ordinary<br>School | In<br>Special<br>School | Home<br>Tuition          | Unsuitable for education at school | Friendly<br>super-<br>vision<br>on leaving<br>school | vision<br>on leaving<br>school | treatment<br>by<br>Psychiatrist |
|                            |       | _                    | _    | _                                     | _                    | -                        | _                       | _                        | _                                  | _  |                                |                                 |
|                            | . 3   | _                    | _    | _                                     | 3                    | -                        |                         |                          | -                                  |  |                                |                                 |
|                            | . 2   | -                    | _    | -                                     | 2                    | -                        | _                       | -                        | _                                  |  |                                |                                 |
|                            | . 5   | -                    | -    |                                       | 5                    | 700                      | _                       | 777                      | _                                  | -  |                                |                                 |
|                            | . 21  | -                    | _    | _                                     | 10                   | 11                       | -                       |                          | _                                  |  |                                |                                 |
| Educationally Sub-Normal . | . 236 | 45                   | _    | 82                                    | 45                   | 3                        | 15                      | 43                       | 3                                  | -  |                                |                                 |
| Enilantia                  | . 6   | _                    | _    |                                       | 3                    | 3                        |                         |                          | -                                  | _  |                                |                                 |
| Maladinated                | . 146 | -                    | _    |                                       | 21                   | 2                        |                         |                          | _                                  | 123  |                                |                                 |
| Dhysically Handisonnad     | . 39  | -                    | -    | _                                     | 24                   | 15                       | -                       | -                        | -                                  | -  |                                |                                 |
| Total .                    | . 458 | 45                   | _    | 82                                    | 113                  | 34                       | 15                      | 43                       | 3                                  | 123  |                                |                                 |

<sup>\*</sup> All children suspected of being deaf or partially hearing are now dealt with not by the individual School Medical Officer but by a Specialist Audiology Team, whose recommendations are referred to on page 27.

As well, the Medical Officers also carried out a further 653 examinations of handicapped pupils in connection with unsatisfactory school attendance, the provision of transport to and from school and the review of home tuition cases.

<sup>†</sup> Of this total 58 pupils were recommended for special educational treatment in the ordinary school and 24 were recommended for Day Special Class for Educationally Subnormal Pupils.

The following table gives details of the numbers of pupils ascertained by the School Medical Officers and Consultant Psychiatrist during the period 1957 to 1966:

|                 |           |         |     | (1) Blind<br>(2) Partially-<br>sighted<br>(3) Deaf |                  |     | (5) I            | Delicate<br>ducatio | hearing<br>onally<br>ormal |     |     |     |       |
|-----------------|-----------|---------|-----|--|------------------|-----|------------------|---------------------|----------------------------|-----|-----|-----|-------|
|                 |           |         |     | (1)  | (2)              | (3) | (4)              | (5)                 | (6)                        | (7) | (8) | (9) | TOTAL |
| Examined:       | 1957      |         |     | 5  | 5                | _   | 2                | 35                  | 341                        | 4   | 43  | 22  | 457   |
|                 | 1958      |         |     | 2  | 5<br>2<br>3      |     | 11               | 24                  | 204                        | 5   | 120 | 34  | 402   |
|                 | 1959      |         |     | 1  | 3                | 1   | 6                | 36                  | 247                        | 5 2 | 116 | 39  | 451   |
|                 | 1960      |         |     | 1  | _                | 4 2 | 3<br>2<br>3<br>2 | 42                  | 299                        | 1   | 62  | 35  | 447   |
|                 | 1961      |         |     |  | 2                | 2   | 2                | 31                  | 283                        | 5   | 65  | 18  | 408   |
|                 | 1962      |         |     | 2  | 2                | -   | 3                | 21                  | 247                        | 1   | 99  | 22  | 397   |
|                 | 1963      |         |     | _  | 3                | 1   | 2                | 15                  | 252                        | 6   | 99  | 21  | 399   |
|                 | 1964      |         |     | 3  | 3                | _   | -                | 26                  | 292                        | 9   | 30  | 18  | 381   |
|                 | 1965      |         |     | 2  | 2 2 3 3 2 3      |     | 3                | 16                  | 268                        | -   | 95  | 36  | 422   |
|                 | 1966      |         |     |  | 3                | 2   | 5                | 21                  | 236                        | 6   | 146 | 39  | 458   |
| Recommended for | or Specia | al Scho | ol: |  |                  |     |                  |                     |                            |     |     |     |       |
|                 | 1957      |         |     | 5  | 5                | -   | 2                | 22                  | 78                         | 4   | 16  | 12  | 144   |
|                 | 1958      |         |     | 2  | 2 3              | -   | 11               | 18                  | 46                         | 5 2 | 13  | 10  | 107   |
|                 | 1959      |         |     | 1  | 3                | 1   | 6                | 30                  | 48                         | 2   | 12  | 7   | 110   |
|                 | 1960      |         |     | 1  | -                | 4   | 3                | 27                  | 59                         | 1   | 10  | 10  | 115   |
|                 | 1961      |         |     | -  | 2                | 2   | 2                | 21                  | 71                         | 5   | 15  | 9   | 127   |
|                 | 1962      |         |     | 2  | 2<br>2<br>3<br>3 | -   | 2<br>3<br>2      | 16                  | 52                         | 1   | 20  | 10  | 106   |
|                 | 1963      |         |     | -  | 3                | 1   | 2                | 11                  | 43                         | 5   | 15  | 8   | 88    |
|                 | 1964      |         |     | 3  | 3                |     |                  | 17                  | 51                         | 6   | 20  | 3   | 103   |
|                 | 1965      |         |     | 2  | 2 3              | -   | 3                | 11                  | 68                         |     | 17  | 23  | 126   |
|                 | 1966      |         |     | -  | 3                | 2   | 5                | 10                  | 45                         | 3   | 21  | 24  | 113   |

Report to Local Health Authority.—During 1966 a total of 58 children were recommended for report to the Local Health Authority under Section 57 of the Education Act as amended—15 under sub-section 4 as being unsuitable for education at school and 43 as being in need of friendly supervision after leaving school. The comparable figures for 1965 were 23 and 33 respectively.

Katharine Elliot School.—The following account of this interesting project has been contributed by Mr. A. I. Rabinowitz, B.A., the School's Principal, whose work has been so constructive since his appointment in September, 1964, when this Unit was transferred to a newly constructed and fully equipped Centre situated at Woodcote Way, Monkmoor Road, Shrewsbury.

"The Katharine Elliot School has now been open for two and a half years and, in this time, has changed quite considerably in both size and conception. Initially opened to cope with a large range of handicaps and to offer education, assessment and social training to about 24 children, the school now has about 30 children attending every day with a total roll of nearly 40. There are also about the same number of children on the waiting list. Thirty children have left the school. The range of handicaps of children attending and on the waiting list is wide, and intentionally so. Currently attending are children suffering from cerebral palsy in all its various forms, spina bifida and its associated conditions, blind and partially sighted children, one or two partially hearing children, psychotics, children for assessment as to whether they should go to an E.S.N. school or a Training Centre, and children suffering from a variety of other handicaps such as Hirschsprung's syndrome and lead poisoning. The age range, also intentionally wide, is from 2 to 9 years.

The school is now staffed by a Principal, who is an Educational Psychologist with many years' experience of teaching in ordinary and special education, two full-time and two part-time teachers, five nursery assistants, a social worker, a whole-time receptionist, a gardener/driver, a part-time carpenter, and a kitchen supervisor. A speech therapist, one full-time and two part-time physiotherapists and a doctor from the School Health Service also participate in the work of the school.

The unit is primarily a school but because of the nature of its work many Health Department services devolve upon it. Dr. A. D. Barker attends the school on an average of eleven sessions per month (eight of these are for routine medical inspection purposes and three for discussion with the staff about problems of the children in general).

Miss M.E.M. Evans is full-time social worker to the school and her duties involve visiting parents of children attending the school and also those whose names are on the waiting list in order to help them with the multitude of problems the birth of a handicapped child brings in its wake. Miss Evans is able to assist the parents in overcoming the emotional problems of having a handicapped child, and in their liaison with the various statutory bodies such as the Supplementary Benefits Section of the Ministry of Social Security.

Miss E. Caswell, Speech Therapist, who attends the school for three sessions a week and is now treating a total of 18 children, comments as follows: 'These children have defects ranging from a simple articulatory problems to complete absence of language. During the three sessions I do here each week, I try to see the more severe cases twice weekly and the less severe once weekly, according to their other commitments. Short term results are unsatisfactory, because of the nature of the majority of the problems, but in general, progress is slow but quite steady.'

There are at present three physiotherapists (one full-time, Miss D. B. Woods, and two part-time, Mrs. C. Duffy and Mrs. E. Guy) giving service equivalent to 1 and 6/11ths in terms of full-time officers. Mrs. Duffy reports on her work as follows: 'We are treating Spina Bifida and Spastic children at the Centre. The aims of our treatment are to try to make the children as independent as possible, e.g. to feed themselves and generally to move about as much as possible. We usually start with getting a child to roll over; then we try to progress to crawling, kneeling and, ultimately, to standing with balance. Once these have been achieved we then try and get the child to use some form of walking aid. Progress is slow, very slow, but progress is made. Time is the ultimate factor.'

As stressed by both Mrs. Duffy and Miss Caswell time is a factor which cannot be neglected in any way at all in the treatment of these children. In considering the children under our care, normal concepts of time have to be disregarded: progress is always made but very often the steps are so minute that to the lay eye, progress might almost seem to be negligible. To check on this progress an elaborate photographic record is kept of every child in conjunction with a series of twice termly reports by every member of the staff so that all the minutiae of the child's progress are recorded and remembered.

The other aspect emphasised by Mrs. Duffy, one of prime importance to the school, is the aspect of independence. From the time the child arrives here great stress is laid on the achievement of at least a degree of independence. This entails discovering for each child at least one area in which he or she can perform unaided. The actual site of this area is relatively unimportant. What has to be discovered is one area where the child can perform unaided and whether this area concerns brushing his teeth alone, eating alone or getting from point A to point B alone, is unimportant. From this point the children are encouraged to do everything themselves and due allowances are made for their handicap. This means that in order,

for instance, to get the child independent with regard to feeding it is often necessary to give the child twice as much time as it needs, three times as much food as it needs, and five times as much space as a normal child would expect so that the child can in the end get a full meal—by his own efforts.

In order to assist in this striving towards independence and also in order to maximise the results of the child's efforts, a small research programme is being undertaken.

The aims of this programme are to discover in which areas the child is suffering a degree of emotional blockage which makes it necessary to achieve a particular task. A further aspect of this study is concerned with the very careful observation of each child to note in which areas maximum value is received for effort expended and in which areas development and experience are lacking. Here we note whether a child is liable to achieve good function with a particular limb or within a particular area and to concentrate on the achievement of this good function to the almost total exclusion of achievement of minimal functions in other areas. A further research programme is underway into the learning behaviour of spastic children as compared with children suffering from spina bifida, etc.

To date this school appears to be fulfilling the majority of the Carnegie researcher's precepts for the school they envisaged in 1958. Dr. Kendall and Miss Calman, the Carnegie researchers, suggested that any Centre established in Shrewsbury should be for the assessment, observation and education of handicapped children, for the dissemination of information, for providing guidance, counselling and company to the parents of these children; for the co-ordination of the work of medical consultants and specialists from all fields; for the establishment of educational, psychological and medical research and finally for the dissemination of general publicity and information about handicapped children. The Katharine Elliot School as it is now, observes, assesses and educates handicapped children; informs, guides and offers company to the parents of these children; co-ordinates to a degree the work of consultants and other medical specialists and also runs a programme of research. The present school is too small because, as in the way of all things, the number of children for whom this school can offer help has grown out of all proportion to the numbers envisaged in the original research.

It is expected that the school building will have been enlarged by the provision of an extension before the next publication of the Principal School Medical Officer's report."

Home Visiting by School Medical Officers.—The School Medical Officers are given lists of handicapped children living in their areas and are expected to pay special attention to these children either in school or by home visiting. Some cases have to be referred to the Central Office for further advice and discussion.

Dr. A. D. Barker spent during the year approximately three half-day sessions per week on home visiting. Sometimes accompanied by Miss M. E. M. Evans, the Health Visitor/Social Worker, Dr. Barker visited the homes of very young handicapped children to examine and assess them, to discuss the question of their educational future with the parents and in general to give them help and guidance in the understanding and management of their children. Details of those young children who are considered suitable for attendance at the Katharine Elliot School for Handicapped Children, referred to on page 14, are passed to the Chief Education Officer. Mr. Rabinowitz, as Principal of the Katharine Elliot School, also visits with Miss Evans the homes of all those children who attend the School or are recommended for future admission.

The following are the numbers of handicapped children in the various categories who received domiciliary visits. They are, of course, also seen in the schools and clinics; home visits are carried out as often as the Medical Officers consider necessary.

## HANDICAPPED PUPILS REQUIRING HOME VISITING

|                         | Pupils<br>on List | Number<br>Visited | Number<br>not Visited | Visits<br>Made |
|-------------------------|-------------------|-------------------|-----------------------|----------------|
| Blind                   | <br>23            | 7                 | 16                    | 7              |
| Partially Sighted       | <br>41            | 17                | 24                    | 19             |
| Doof                    | <br>8             | 4                 | 4                     | 4              |
| Partially Hearing       | <br>48            | 30                | 18                    | 44             |
| Some Hearing Loss       | <br>120           | 51                | 69                    | 56             |
| Delicate                | <br>225           | 111               | 114                   | 142            |
| Educationally Subnormal | <br>789           | 310               | 479                   | 356            |
| Epileptic               | <br>88            | 37                | 51                    | 46             |
| Maladjusted             | <br>44            | 26                | 18                    | 32             |
| Physically Handicapped  | <br>457           | 253               | 204                   | 302            |
| Speech Defective        | <br>13            | 8                 | 5                     | 8              |
|                         | 1,856             | 854               | 1,002                 | 1,016          |
|                         |                   |                   |                       |                |

Supervision of School Leavers.—The School Medical Officer, at the last routine medical examination of each pupil, makes a report if he considers the pupil unsuitable for work of any particular type. When the pupil leaves school this report is sent by the Head together with the "School Leaving Report" to the Local Vocational Guidance Officer, to ensure that any pupil on leaving school is not placed in employment for which he or she is either mentally or physically unsuited.

Handicapped pupils are also encouraged to enrol in the Register of Disabled Persons and so obtain through the Ministry of Labour sheltered employment and also special educational training open to Registered Disabled Persons.

Special arrangements exist to deal with the problem of after-care for pupils leaving Petton and Haughton Hall Residential Schools, and Mental Welfare Officers and Youth Employment Officers do, in suitable cases, visit the special schools before the child actually leaves. Each case is then followed-up at home to ensure that the child settles down in employment and becomes satisfactorily adjusted to post school life.

School leavers from Haughton Hall and Petton Hall who require supervision are followed-up by the Female and Male Mental Welfare Officers respectively and these officers attend the case conferences at the special schools concerned.

In order that handicapped children may be kept constantly under review in the twelve months preceding school leaving and during the following five years, an After-Care Committee coordinates the efforts of the various bodies concerned, namely the Education, Children's, Health and Welfare Departments, and the Ministry of Labour's Rehabilitation and Youth Employment Service.

Special Residential Schools for Educationally Subnormal Pupils.—Special Residential Schools for children who are educationally subnormal are provided by the Local Education Authority—boys at Petton Hall (90 places) and girls at Haughton Hall (73 places). The pupils have intelligence quotients between 50 and 80 and stay until 16 years of age.

Because of the unsatisfactory condition in which some of the pupils were returning to the schools after holiday periods, Health Visitors make "follow -up" visits during each holiday to the homes concerned. This is primarily to establish a good relationship with both child and family and also to ensure that each pupil is receiving any necessary medical or nursing care and returns to school free from infection and infestation.

## SCHOOL REPORT OF THE PRINCIPAL DENTAL OFFICER

Towards the end of the year I was afraid that my report would once again have been a completely gloomy one on the question of professional staff recruitments. Fortunately in December we received two applications from newly qualified Dental Surgeons—namely Mr. Jarrett and Mr. Price. They attended for interview, and commenced duties in January, 1967. This gives a whole-time-equivalent of 8.3 Dental Officers. The present school population is approximately 50,000 with 27,000 "under 5's"—this means 9,000 "under 15's" per Dental Officer, or 6,000 school children. This figure is about 3,000 too high for it to be possible to carry out more comprehensive treatment for each child.

New Chrome Cobalt denture processing equipment was installed in 1966 at 5a, Belmont, the County Dental Service Headquarters in Shrewsbury, and is proving very satisfactory. It has, however, presented a problem in ventilation, and this, amongst others, is one of the reasons why 5a, Belmont, requires urgent alteration.

For part of the year we had two Dental Auxiliaries on the Staff—Miss Upton and Miss Pollitt, the latter joining us in September. Miss Pollitt worked full-time at 5a Belmont and Miss Upton, who unfortunately left us at the end of the year, divided her time between the Ludlow and Wellington Clinics. At Wellington Clinic one of the mobile units was parked to provide an extra surgery.

Dental Health Education was continued apace, and Miss Smith, our very willing and able Dental Hygienist, who does the major amount of this work, has been helped by the Dental Auxiliaries.

The treatment of handicapped and nervous children by using general anaesthetics, continues, and forms a very important part of the School Dental Service in Shropshire. This type of work has been carried out for a number of years at the Shrewsbury Clinic but sessions are now being held at Wellington Clinic. Without the help of Drs. Polland and Whitney, both Consultant Anaesthetists, this very valuable work would not have been possible.

A summary of the work done during the year is given below, and in my opinion compares very favourably with National returns, except for the inspections which, considering the high proportion of children found to require treatment, the high acceptance rate, combined with shortage of staff, is not surprising.

# Work done during the year (these figures include those relating to the Mobile Dental Units):

| Attendances and Treatment:   |         |        |         |          |        |       | Ages<br>5 to 9 |      | Ages<br>10 to 14 | Ages<br>15 & over |         |
|------------------------------|---------|--------|---------|----------|--------|-------|----------------|------|------------------|-------------------|---------|
| First Visit                  |         |        |         |          |        |       | 3,364          |      | 3,451            | 799               | 7,614   |
| Subsequent visits            |         |        |         |          |        |       | 4,271          |      | 6,411            | 1,753             | 12,435  |
| Total visits                 |         |        |         |          |        |       | 7,635          |      | 9,862            | 2,552             | 20,049* |
| Additional courses of treatn | nent co | mmen   | ced     |          |        |       | 535            |      | 375              | 109               | 1,019   |
| Fillings in permanent teeth  |         |        |         |          |        |       | 2,986          |      | 8,293            | 2,553             | 13,832  |
| Fillings in deciduous teeth  |         |        |         |          |        |       | 3,577          |      | 300              | _                 | 3,877   |
| Permanent teeth filled       |         |        |         |          |        |       | 2,596          |      | 7,120            | 2,296             | 12,012  |
| Deciduous teeth filled       |         |        |         |          |        |       | 3,302          |      | 261              | -                 | 3,563   |
| Permanent teeth extracted    |         |        |         |          |        |       | 331            |      | 1,809            | 441               | 2,581   |
| Deciduous teeth extracted    |         |        |         |          |        |       | 5,429          |      | 1,583            |                   | 7,012   |
| General anaesthetics         |         |        |         |          |        |       | 2,005          |      | 1,153            | 176               | 3,334   |
| Emergencies                  |         |        |         |          |        |       | 902            |      | 564              | 121               | 1,587   |
| Number of Pupils X-rayed     |         |        |         |          |        |       |                |      |                  |                   | 471     |
| Prophylaxis                  |         |        |         |          |        |       |                |      |                  |                   | 1,744   |
| Teeth otherwise conserved    |         |        |         |          |        |       | * *            |      |                  |                   | 252     |
| Number of teeth root filled  |         |        |         |          |        |       |                |      |                  |                   | 12      |
| Lulavia                      |         |        |         |          |        |       |                |      |                  |                   | 10      |
| Crowns                       |         |        |         |          |        |       |                |      |                  |                   | 31      |
| Courses of treatment compl   | otad    |        |         |          | * *    |       |                |      |                  |                   |         |
|                              |         |        | **      |          |        |       |                |      |                  |                   | 5,501   |
| * In additio                 | n 1,380 | VISITS | were ca | arried ( | out by | the D | ental Hy       | gien | ist.             |                   |         |

| Orthodontics:                              |           |          |         |        |     |          |      |        |       |
|--|-----------|----------|---------|--------|-----|----------|------|--------|-------|
| Cases remaining from previous year         |           |          | <br>    |        |     |          |      |        | 291   |
| New cases commenced during year            |           |          | <br>    |        |     |          |      |        | 188   |
| Cases completed during year                |           |          | <br>    |        |     |          |      |        | 110   |
| Cases discontinued during year             |           |          | <br>    |        |     |          |      |        | 9     |
| No. of removable appliances fitted         |           |          | <br>    |        |     |          |      |        | 275   |
| No. of fixed appliances fitted             |           |          | <br>1.1 |        |     |          |      |        | 67    |
| Pupils referred to Hospital Consultant     |           |          | <br>    |        |     |          |      |        | -     |
| Prosthetics:                               |           |          |         | 5 to 9 |     | 10 to 14 | 15   | & over | Total |
| Pupils supplied with F.U. or F.L. (first   | time)     |          | <br>    | _      |     | 1        |      | 1      | 2     |
| Pupils supplied with other dentures (first | st time)  |          |         | 5      |     | 33       |      | 20     | 58    |
| Number of dentures supplied                |           |          | <br>    | 6      |     | 56       |      | 44     | 106   |
| Anaesthetics:                              |           |          |         |        |     |          |      |        |       |
| General Anaesthetics administered by I     | Dental C  | officers | <br>    |        |     |          |      |        | 608   |
| Inspections:                               |           |          |         |        |     |          |      |        |       |
| (a) First Inspection at school. Number     | r of Pur  | oils     |         |        |     |          |      |        | 7,725 |
| (b) First Inspection at clinic. Number     |           |          |         |        |     |          |      |        | 4,608 |
| Number of $(a) + (b)$ found to requ        | ire treat | tment    | <br>    |        |     |          |      |        | 9,221 |
| Number of $(a) + (b)$ offered treatn       |           |          |         |        |     |          |      |        | 8,920 |
| (c) Pupils re-inspected at school or clir  |           |          | <br>    |        |     |          |      |        | 1,505 |
| Number of (c) found to require tre         |           |          | <br>    |        |     |          |      |        | 1,017 |
|  |           |          |         |        |     |          |      |        | 27772 |
| Sessions:                                  |           |          |         |        |     |          |      |        |       |
| Sessions devoted to treatment              |           |          | <br>2.2 |        |     |          | 24.6 |        | 3,108 |
| Sessions devoted to inspection             |           |          | 4 (20)  |        |     |          |      |        | 243   |
| Sessions devoted to Dental Health Edu      |           |          |         | 4      | 0.0 |          |      | 0.000  |       |

Under the provisions of Section 78 of the Education Act, 1944, all the pupils (approximately 80) of Condover Hall School for the Blind were dentally examined and treatment carried out as necessary."

C. D. CLARKE, Principal Dental Officer.

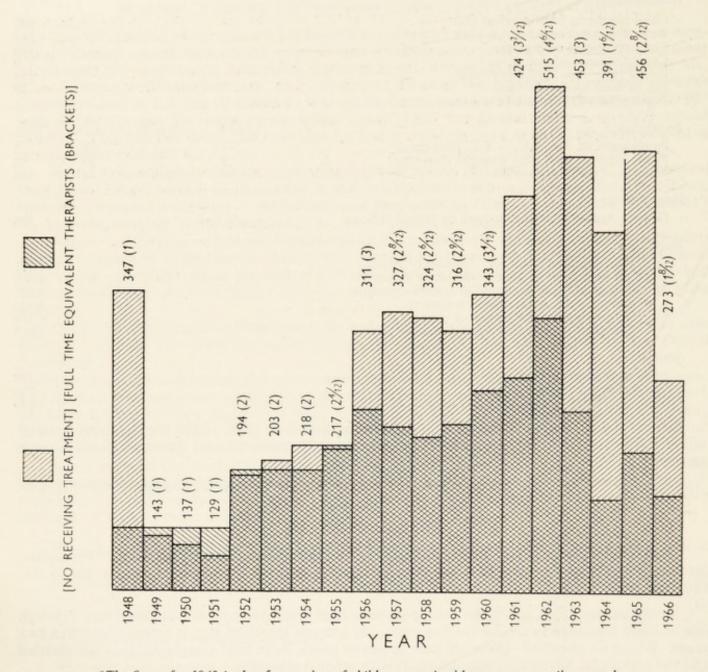
#### SPEECH THERAPY

A perennial plaint is the shortage of staff to fill the establishment of five Speech Therapists, (excluding the Senior post) and it has been of interest to study the information relevant to this situation.

In the last ten years, seventeen Therapists have been employed by this Authority, and although one of these remained in service for five years, the average length of stay is actually less than two years. Where do they go? Three are now in Senior posts, three have emigrated, six have married and the remainder have taken appointments with other Authorities.

What is the relationship between these fluctuating numbers of staff and the numbers of children treated? The histogram below attempts to show this by a comparison of the annual figures since the speech therapy service originated nineteen years ago. It does show that a high case load can be maintained only for a short while when there is a decrease in staff, but one can also envisage the comprehensive service that could be developed in this County with a full complement of therapists.

There is a national shortage of Speech Therapists and it can only be hoped that eventually of the number qualifying each year (average 120) more will remain in the service, that salaries will increase, and working conditions become more attractive.



\*The figure for 1948 is that for number of children examined but not necessarily treated

In May, 1966, we were fortunate in obtaining the services on a part-time basis of Mrs. M. Sheldon, but in September, 1966, Mrs. C. Maughan, who had resumed duty in 1965 as a part-time officer, resigned in order to become a mother, and in September, we were pleased to have Miss E. Caswell join the staff as a full-time therapist. Nevertheless a full service is still not available and it is a matter of some concern that schools where there is a high incidence of defective speech amongst the pupils, namely Petton Hall, Haughton Hall and the Junior Training Centre, have no Speech Therapist visiting.

One method of easing the general situation was thought to be feasible after discussion between the Senior Speech Therapist and the remedial teachers of the Education Department. It was suggested that if the remedial teachers were given details of the children awaiting treatment in the schools they visit, including instruction in some simple method of speech analysis, they would be able to assess the speech handicap. This would go some way towards allowing the Speech Therapists to grade the waiting lists in order of priority of necessity.

It is certain that the teaching staff of schools can assist in the simple treatment of children with mild defective speech and in a recent circular the Department of Education and Science have asked if Local Education Authorities can organise, where possible, some form of short training for teachers. It is hoped that this scheme will be introduced into this County in the near future.

Possibly of greater importance is the help that the child can receive in the home from its parents and in the majority of cases the therapist enlists the help of the mother to this end. Unfortunately it is the mother who always seems to assume this responsibility—the giving to the child of private speech lessons all the year round. It is generally agreed that if men had to attend to their children the latter would never use so many words and the child would scarcely learn to understand and talk as soon as it does when cared for by women. Elizabeth Browning illustrates this point in Aurora Leigh:

Women know

The way to rear up children, (to be just)
They know a simple, merry, tender knack
Of stringing pretty words that make no sense,
And kissing full sense into empty words,
Which things are corals to cut life upon,
Although such trifles: children learn by such
Love's holy earnest in a pretty play
And get not over—early solemnized—
Such good do Mothers. Fathers love as well
—Mine did, I know—but still with heavier brains,
And wills more consciously responsible,
And not as wisely, since less foolishly.

The following table gives particulars of the conditions which necessitated attendance of 273 children who were given speech therapy during 1966:

| Condition                |   | Cases discharged<br>during year | On Register<br>31st December |
|--------------------------|---|---------------------------------|------------------------------|
| Stammer                  |   | 28                              | 23                           |
| Cleft Palate             |   | 4                               | 4                            |
| Severe Dyslalia          |   | 30                              | 44                           |
| Nasality + or            |   | _                               | 4                            |
| Dyslalia                 |   | 35                              | 51                           |
| Voice Defect             |   | 1                               | 1                            |
| Mongolism                |   | -                               | _                            |
| Non Communicating        |   | 1                               | 6                            |
| Partially Hearing        |   | 4                               | 2                            |
| Educational Subnormality |   | 1                               | 4                            |
| Dysarthria               |   | 5                               | 9                            |
| Mixed Defect             |   | 1                               | 3                            |
| Dysphasia                |   |                                 | 3                            |
| Mental Defect            |   |                                 | 3                            |
| Language Defect          |   | 1                               | 5                            |
| TOTAL                    | • | 111                             | 162                          |

These totals include 8 children from 2 neighbouring Counties, the latter paying the Shropshire Education Authority for their treatment.

# At the end of 1966, Speech Therapy Clinics were being held at the following Centres:

|           | Monday                     | Tuesday                           | Wednesday                         | Thursday                                    | Friday                     |
|-----------|----------------------------|-----------------------------------|-----------------------------------|---|----------------------------|
| Morning   | 1 Belmont,<br>Shrewsbury   | Oswestry<br>C.W.C.                | Madeley<br>C.W.C.                 | Katharine Elliot<br>School                  | Condover Hall              |
|           | Hadley Sec. Mod.<br>School | Katharine Elliot<br>School        | 1 Belmont<br>Shrewsbury           | Bridgnorth C.W.C.                           | Katharine Elliot<br>School |
| Afternoon | Oswestry C.W.C.            | Oswestry C.W.C.                   | Dawley C.W.C.                     | Eye, Ear & Throat<br>Hospital               | Whitchurch C.W.C.          |
|           | Wellington<br>C.W.C.       | Eye, Ear & Throat<br>Hospital     | 1 Belmont<br>Shrewsbury           | Albrighton C.E.<br>& Cty. Infants<br>School |                            |
|           |                            | Albrighton Cty.<br>Infants School | Albrighton Cty.<br>Infants School |   |                            |
| Evening   |                            | Eye, Ear & Throat<br>Hospital     |                                   |   |                            |

# CASES TREATED

| On Register | New Cases   | Cases discharged | On Register   |
|-------------|-------------|------------------|---------------|
| 1st January | during year | during year      | 31st December |
| 132         | 141         | 111              | 162           |

# CASES DISCHARGED

|        |                           |                      | to benefit<br>er treatment |                          | Referred          |       |
|--------|---------------------------|----------------------|----------------------------|--------------------------|-------------------|-------|
| Normal | Substantially<br>Improved | Slightly<br>Improved | Unimproved                 | Left School<br>or Ceased | Other<br>Services | TOTAL |
| 56     | 10                        | 13                   | 3                          | 23                       | 6                 | 111   |

In a small number of cases, discharge is temporary and children can attend later for further treatment.

# In addition:

- 120 children made single visits to Centres for advice.
- 147 visits were made to individual homes.
- 20 visits were made to schools to see children and discuss cases with teachers.

In all, 273 children having regular treatment in the County made a total of 2,230 attendances.

At the time of writing there is a total of 301 children waiting for treatment and also 155 waiting to be reviewed after brief periods of treatment. The greatest number waiting for treatment is in the Shrewsbury district, but in the Market Drayton, Ludlow and Newport areas, where no Speech Therapist is working, there has been a resulting build-up in cases. This is a problem which we hope to tackle in the coming year, an easy task if we are fortunate in recruiting extra staff.

E. PAULETT

Senior Speech Therapist

# AUDIOLOGY

It may be useful to clear some misconceptions if an attempt is made to define the field covered by audiology and the role of the audiologist.

Audiology refers to the study of hearing and hearing disorders and includes an interest in the function of the ear as well as diseases of the ear. The field of audiology is a broad one to which varied specialists, namely the Medical Officer of Health, Consultant Otologist, Paediatrician and Psychologist, contribute their knowledge and skills.

It has become clear, to quote Professor Ian G.Taylor, "that the extension of work in this field calls for one practitioner to have particular interest, knowledge and skill as an *audiologist*. This is a person who has been trained to draw together all the relevant parts of the various disciplines bearing on the diagnosis and assessment, clinical and educational management of each child". Among the contributing disciplines are those of physics, medicine, psychology, education and sociology. Clinical audiologists test hearing and may make recommendations concerning the use and choice of hearing aids, but they do not provide hearing aids.

An audiometrician is a person trained to use an audiometer and who is capable of using such a machine to measure objectively the responses to test signals by the patient. The audiometrician does not make a diagnosis nor recommend any approach along the lines of assessment or management of the hearing handicapped.

In July 1966, Mrs. J. Robinson was trained by the audiologist in the principles of pure tone audiometry and was then appointed as audiometrician, her duties being the sweep frequency testing of all school entrants and eight year old pupils in maintained schools of this Authority.

Two Medical Officers, who had been given courses of instruction the previous year by the audiologist in the basic clinical techniques of audiological testing and ascertainment, attended a one week course in March, 1966, at the Department of Audiology, University of Manchester. In April, 1966, one other Medical Officer attended a week-end refresher course for Medical Officers at the same Department.

The total staff of the Health Department audiology team now comprises:

! Audiologist

7 Medical Officers

11 Health Visitors

1 Audiometrician

The second annual one-day refresher course was held at the Shirehall in July and the subjects covered by films and lectures were as follows:

Cochlear Dynamics, theories of hearing.

Modern Problems of Middle Ear Deafness.

Work of the Peripatetic Teacher of the Deaf in Shropshire.

Problems of the Child with Hearing Difficulties.

Screening tests of hearing of children aged 2—5 years.

Physical Diagnosis—Ears and Hearing.

# Infant Hearing Tests

During the past year, 1,511 babies (out of 5,866 live births attributable to the County) were placed on the "at risk" register. Testing of these babies is usually made when they have reached the age of 8—9 months and during the year the number tested at the 188 clinics held was 1,385, the results being summarised in the following table:

## INFANT HEARING TESTS PERFORMED

|                           |             |             | Fai        | iled or did not co-ope          | erate                       |
|---------------------------|-------------|-------------|------------|---------------------------------|-----------------------------|
|                           | Tested      | Passed      | For Retest | For Medical<br>Audiology Clinic | To be seen<br>by Audiologis |
| New cases<br>Review cases | 1,341<br>44 | 1,258<br>31 | 74<br>9    | 3 1                             | 6 3                         |
| TOTAL                     | 1,385       | 1,289       | 83         | 4*                              | 9†                          |

\*Of these 4 cases: 2 are to have further hearing tests;

1 was discharged with normal hearing in 1967; and

1 subsequently attended the Hearing Assessment Clinic and the issue of a hearing aid

was recommended.

†Of these 9 cases: 6 were discharged with normal hearing;

1 was referred to the Medical Audiology Clinic; and

2 are to have further hearing tests.

It was noticeable that of this number tested only one child was discovered to be profoundly deaf. In the previous year two children were found to have a congenital defect of hearing.

# Sweep Frequency Testing

#### SWEEP FREQUENCY TESTS PERFORMED

| Category                | Tested | Normal | Hearing<br>Suspect |
|-------------------------|--------|--------|--------------------|
| Primary School Children | 9,004  | 8,081  | 923                |
| Suspected Deafness      | 32     | 26     | 6                  |
| Backwardness            | 40     | 37     | 3                  |
| Speech Disorders        | 13     | 11     | 2                  |
| TOTAL                   | 9,089  | 8,155  | 934                |

The audiometrician, who was appointed in July, completed in the remaining part of the year the testing of nine times as many children as were seen in the whole of the previous year. On average one child in every ten fails this test and, as mentioned in previous reports, it is from within this group of failures that the bulk of children later referred for medical or special educational treatment are found.

The sweep frequency testing of 5 and 8 years old school children performed by the audiometrician is now carried out at 25 decibels across the frequencies 500, 1,000, 2,000, 4,000, and 6,000 cycles per second and any child failing this test is re-screened at 30 decibels. If there is a failure at the 30 decibel level the child is referred to the Medical Audiology Clinic. Those who fail at 25 decibels but pass at 30 decibels are kept under observation by the school teaching staff and and are referred to this office for a clinic appointment in case of any difficulty at school. This scheme is an experimental one for a period of twelve months following which an analysis will be made of the results. This is a calculated "risk" and it will be interesting to note what effect the lowering of the pass threshold will have on the number and type of cases referred on to audiology clinics.

Medical Audiology Clinics.—The failures at sweep frequency testing in schools and also other children who have been referred by School Medical Officers, Speech Therapists, Educational Psychologists, Teachers of the Deaf, Medical Practitioners and Hospital Specialists are all seen at the Medical Audiology Clinic. These clinics are staffed by one of the Medical Officers trained in this work, or the Audiologist, and one trained Health Visitor.

During 1966, a total of 287 clinics was held and 2,355 detailed hearing tests were made, with the results indicated below:

# RESULTS OF TESTS AT MEDICAL AUDIOLOGY CLINICS

|                                |               |         |            |          |            |                     |          |          | Heari    | ng D     | efective |            |
|--------------------------------|---------------|---------|------------|----------|------------|---------------------|----------|----------|----------|----------|----------|------------|
|                                |               |         | mber Tes   |          |            |                     |          | One      | Ear      |          | Both     | Ears       |
|                                |               |         | rge Group  | Secon-   | Dis-       | Further<br>Investi- | Sev      | ere      | Mod      | erate    | 1111     | Mod        |
| Referred by                    | Cases         | Under 5 | Primary    | dary     | charged    | gation              | L.       | R.       | L.       | R.       | Severe   | erate      |
| Aural Surgeon                  | New<br>Review | 1 2     | 19<br>22   | 8<br>11  | 8 8        | 2 4                 | 1        | 1        | 2        | 2 4      | 3 2      | 10<br>15   |
| Audiologist                    | New<br>Review | _       | 2          | =        | 1          | 1                   | =        | _        | =        | _        | =        | =          |
| Teacher of Deaf                | New<br>Review | =       | 26<br>31   | 2<br>11  | 8<br>14    | 4 6                 | <u></u>  | 1        | 1 3      | 3 4      | 2 3      | 10<br>10   |
| Educational<br>Psychologist    | New<br>Review | =       | 7 2        | =        | 3          |                     | _        | =        | _        | 2        | =        | 2          |
| Family Doctor                  | New<br>Review | =       | 20<br>13   | 2        | 7          | 1                   | <u>_</u> | _        | <u>_</u> | 3        | 2        | 12<br>8    |
| Head Teacher                   | New<br>Review | 1       | 24<br>19   | 2 9      | 7<br>6     | 4 3                 | =        | =        | 4 3      | 2        | 1        | 9<br>15    |
| Health Visitor/School<br>Nurse | New<br>Review | 2       | 30<br>30   | 3<br>8   | 23<br>10   | 2 3                 | <u>_</u> | <u>_</u> | 1        | 1 2      | 1 4      | 7<br>17    |
| Infant Assessment<br>Clinic    | New<br>Review | 5<br>4  | 6<br>25    | =        | 3<br>1     | 4<br>8              | =        | _        | <u>_</u> | _        | <u>-</u> | 4<br>12    |
| School Medical Officer         | New<br>Review | 1       | 208<br>215 | 48<br>75 | 105<br>85  | 25<br>26            |          | 3        | 12<br>13 | 10<br>13 | 10<br>22 | 92<br>126  |
| Speech Therapist               | New<br>Review | =       | 36<br>21   | 1 4      | 26<br>9    | 4 5                 | =        | =        | 1<br>7   | 1        | 2        | 3 2        |
| Survey                         | New<br>Review | =       | 1 2        | =        | =          | =                   | =        | =        | =        | 1        | =        |            |
| Sweep Test                     | New<br>Review | =       | 723<br>399 | 20<br>78 | 475<br>165 | 26<br>4             | 1 6      | 6 4      | 34<br>37 | 51<br>32 | 10<br>39 | 140<br>190 |
| 2 H.P. Case (E.S.N.)           | New<br>Review | =       | 56<br>4    | 22<br>6  | 65<br>4    | =                   | 1        | _        | 2        | 3        |          | 7 3        |
| Parent                         | New<br>Review | 2       | 29<br>44   | 3 3      | 12<br>16   | 3 4                 | =        | 1 2      | 1 5      | 2 3      | 1 3      | 14<br>14   |
| Paediatrician                  | New<br>Review | _       | 3 3        | =        | 1          | <u></u>             | =        | -        | =        | =        | =        | 2          |
| To                             | OTALS         | 18      | 2,020      | 317      | 1,064      | 141*                | 15       | 22       | 129      | 145      | 112      | 727        |
|                                |               |         | 2,355      |          |            |                     |          | 2,3      | 55       |          |          |            |

<sup>\*</sup>This figure includes cases where the Medical Officer was unable to diagnose definitely any permanent hearing loss. The children concerned may, at the time of examination have been suffering from such conditions as colds, catarrh, etc., or have had wax in the ears. In order not to inundate the Otologists with unnecessary referrals these children were called for further investigation before a final decision or recommendation was made.

Following attendance at the above Clinics, recommendations and referrals were made as follows:

| Recommended to sit in an advantageous positio      | n in c | class   |       | 180 |
|--|--------|---------|-------|-----|
| Notified to the Head of the School for informat    | ion a  | nd guid | lance | 115 |
| Notified to the Peripatetic Teacher of the Deaf to |        |         |       |     |
| in School  |        |         |       | 85  |
| Referred to-Speech Therapist                       |        |         |       | 25  |
| -Educational Psychologist                          |        |         |       | 58  |
| F '1 F   |        |         |       | 26  |
| -Ear, Nose and Throat Specialists                  |        |         |       | 14  |
| -Hearing Assessment Clinic, for a                  | final  | decisio | n on  |     |
| operative treatment, special ed                    |        |         |       |     |
| placement or the provision of a                    |        |         |       | 145 |

During 1966 there was a 20% increase in the work undertaken at Medical Audiology Clinics. For some while it has been realised that the comprehensive table of results shown above does not, in fact, indicate meaningfully the degree of hearing handicap of the children. In order to tackle this problem from an angle other than the measuring of hearing loss in one or both ears, it has been decided to attempt the assessment of degree of hearing handicap. This will take into account the pure tone audiometric measurements, as well as the child's ability to understand ordinary speech. The Medical Officer will then grade the findings along a six-point scale ranging between "not significant" to "extreme". The coming twelve months will see this method put into operation and the results should prove to be of greater use to the members of the team in both the Education and Health Departments.

Hearing Assessment Clinics.—These are attended by Mr. E. N. Owen, F.R.C.S., Aural Surgeon at the Eye, Ear and Throat Hospital, Shrewsbury; the Audiologist; a Teacher of the Deaf; an Audiology Technician from the Hospital Group; one of the School Medical Officers and one of the specially trained Health Visitors.

Each child is thoroughly assessed by the Specialists in attendance and the parents are advised and given any help and guidance required. The family doctor is notified that the child will be attending for assessment and is always advised of the outcome, as is the Head Teacher of the child's school.

During the year the same number of clinics was held as in the previous year, but there was approximately 14% increase in the number of children seen.

In 1966 at 29 Hearing Assessment Clinics the following recommendations were made for 173 children:

| Provision of Medresco (N.H.S.) hearing aids        |        |         |      | 28 |
|--|--------|---------|------|----|
| Operative treatment                                |        |         |      | 50 |
| Admission to the Partially Hearing Unit at Cole    | eham   | School  |      | 4* |
| Review at the Medical Audiology Clinic             |        |         |      | 70 |
| Recall for review at a later date                  |        |         |      | 7  |
| To be seen by Mr. Owen at the Hospital Out-pa      | atient | Departi | ment | 2  |
| Reference to a Consultant for treatment at the rec |        |         |      | 1  |
| Special home visits by the Audiologist             |        |         |      | 2  |
| Discharged   |        |         |      | 11 |

<sup>\*</sup>This figure includes 2 children who were also recommended for a Medresco (N.H.S.) hearing aid.

Again it should be stressed that although the Audiologist has the task of co-ordinating the audiological services the Assessment Clinic is a joint clinical session and recommendations made are "team" ones.

It is pleasing to report on the close relationship that exists between this Authority and the neighbouring counties of Radnorshire, Montgomeryshire and Merionethshire. Assessments of hearing handicapped children, prolonged parent guidance and auditory training for profoundly deaf children from these areas have been undertaken throughout the year by the Audiologist.

Montgomeryshire is setting up its own audiology service and there has been frequent interchange of ideas between its County Medical Officer and the Consultant Otologist and Audiologist from Shropshire. The latter have visited Newtown, Montgomeryshire, and organised a short course of lectures and demonstrations for Health Department personnel.

Very useful visits were made by the Senior Medical Officer and Audiologist to Rayners School Buckinghamshire, and Bridge House School, Yorkshire, during the year. Fortunately it is some while since a child from this County was sent away to a Residential School for the deaf and the major reason for this must be the excellent work that is performed by the Teachers of the Deaf at the Partially Hearing Unit in Shrewsbury.

There is an ever increasing awareness of the problems of the hearing impaired child and doctors, teachers and parents nowadays make use of the audiology service in referring cases of sinusitis, tonsillitis, colds or hay fever; children who function below their potential ability at school; who have become a behaviour problem at school and home; are withdrawn and do not mix with other children; who fail to articulate, or omit, sounds of speech; who want to watch the speaker's face; fail to pay attention, etc. It is inexcusable for such children to be neglected and with more comprehensive sweep frequency testing and early referral these children should be discovered before they manifest these behaviour characteristics.

E. PAULETT

Audiologist/Senior Speech Therapist

## CHILD GUIDANCE SERVICE

Dr. Benady, Consultant Child Psychiatrist, gives the following account of the work carried out by the Child Guidance Service during 1966:

"We were very pleased and fortunate to welcome to the Clinic staff in November, 1966, Miss Bridget Downer as Senior Psychiatric Social Worker, so that we are now approaching full strength and are able to offer a wider range of therapeutic procedures, such as family therapy; fortunate because of her wide experience and knowledge of Shropshire which she has already put to good use. All this also means that additional clerical staff has had to be employed and we took this opportunity to centralise the administration of the total Child Psychiatric Services for the County. Increasing use has been made of the Clinic, in particular by General Practitioners and twenty per cent more cases were referred to the Clinic this year than last year.

On the Psychological side, the development of remedial therapy by the School Psychological Service has made available skilled help for our disturbed children, and the Psychologists have also instituted group work. On these days as many as thirty children visit and receive remedial educational help and group therapy.

The increasing size of the Clinic staff means that we are now approaching saturation point in our present premises and the administrative staff is also being pressed, especially as we have been maintaining close contacts with the referring agencies in our efforts to help the families referred to us. Again, from an administrative point of view, the disposal problem of disturbed adolescent boys remains. We are not able to offer them anything other than psychotherapy when often their behaviour is too disturbed at home or at school for them to remain accepted by the community. The disturbance is not just one of bad behaviour but often of intense personal unhappiness.

We all feel at the Clinic that this has been a year of consolidation and progress and we look forward to the establishment in the near future of an Observation Class for severely maladjusted children such as young psychotic children or brain damaged children.

Our close ties with the Education Department, the School Medical Officers and the Hospitals have been strengthened, in spite of the additional work load that has been carried, and we hope that our clients have benefited from this."

# Summary of work done during 1966

| Total number of new referrals           |          |          |        |          |         |         |        |          |        | 324                    |
|---|----------|----------|--------|----------|---------|---------|--------|----------|--------|------------------------|
| Unco-operative                          |          |          |        |          |         |         |        |          |        | 10                     |
| Awaiting appointments                   |          |          |        |          |         |         |        |          |        | 18                     |
| Total number of new cases seen          |          |          |        |          |         |         |        |          |        | 316                    |
| Old cases re-referred for further help  |          |          |        |          |         |         |        |          |        | 36                     |
| Treatment cases carried forward from 19 |          |          |        |          |         |         |        |          |        | 103                    |
| Total case load                         | • • •    |          |        |          |         |         |        |          |        | 455                    |
| Sources of referral:                    |          |          |        |          |         |         |        |          |        |                        |
| Head Teachers                           |          |          |        |          |         |         |        |          |        | 26%                    |
| Private Doctors                         |          |          |        |          |         |         |        |          |        | 26%<br>27%<br>7%<br>2% |
| Principal School Medical Officer        |          |          |        |          |         |         |        |          |        | 27%                    |
| Parents                                 |          |          |        |          |         |         |        |          |        | 7%                     |
| Probation Officers                      |          |          |        |          |         |         |        |          |        | 2%                     |
| Miscellaneous, e.g. Children's Depa     | artment  | , Psych  | iatric | Hospita  | als, Ed | ucation | Welfa  | are Off  | icers, |                        |
| Speech Therapists, N.S.P.C.C., He       | ealth Vi | isitors. |        |          |         |         |        |          |        | 12%                    |
|   |          |          |        |          |         |         |        |          |        |                        |
| Reasons for referral:                   |          |          |        |          |         |         |        |          |        |                        |
| Behaviour difficulties such as aggress  | ive bel  | aviour   | covere | temne    | r tantr | ime te  | iancu  | nilfarin |        | 33%                    |
| Nervous conditions such as night ter    |          |          |        |          |         |         |        |          |        | 27%                    |
| Physical disorders, e.g. day or night   |          |          |        |          |         |         |        |          |        | 27%                    |
| Failure in school. Difficulties either  |          |          |        |          |         |         |        |          |        | /0                     |
| work                                    |          |          |        |          |         |         | Benera |          |        | 12%                    |
| Miscellaneous reasons: vocational gu    |          |          |        |          |         |         |        |          |        | 1%                     |
| Number of new cases seen by Psychi      |          |          |        |          |         |         |        |          |        | 143                    |
| Diagnostic Interviews only              |          |          |        |          |         |         |        | 47       |        |                        |
| Taken on for treatment                  |          |          |        |          |         |         |        | 96       |        |                        |
| Treatment cases carried forward         | from 1   | 1965     |        |          |         |         |        | 56       |        |                        |
| Total case load                         |          |          |        |          |         |         |        | 152      |        |                        |
| Number recommended for admission        | n to Scl | hools fo | r Mals | adjusted | Child   | ren     |        |          |        | 21                     |

# B.C.G. VACCINATION OF SCHOOL CHILDREN

B.C.G. vaccination against Tuberculosis is available, with parental consent, to:

- (a) school children in the year preceding their fourteenth birthday;
- (b) children of 14 years and upwards who are still at school and students at universities, teacher training colleges, technical colleges and other establishments for further education; and
- (c) whole school classes, which may include a few children under 13 years, for convenience.

The following particulars of schools visited for B.C.G. vaccination purposes during 1966, with comparative figures for 1965:

|                       |      |      | Maintained and<br>Grant-aided Schools |       | Independent<br>Schools |           | Total |       |
|-----------------------|------|------|---------------------------------------|-------|------------------------|-----------|-------|-------|
|                       |      |      | 1966                                  | 1965  | 1966                   | 1965      | 1966  | 1965  |
| Schools visited       | <br> | <br> | 47                                    | 34    | 25                     | 17        | 72    | 51    |
| Children tested       | <br> | <br> | 3,496                                 | 2,248 | 600                    | 276       | 4,096 | 2,524 |
| Reactors—positive     | <br> | <br> | 200                                   | 145   | 70                     | 28<br>242 | 270   | 173   |
| -negative             | <br> | <br> | 3,097                                 | 1,963 | 526                    | 242       | 3,623 | 2,205 |
| Not read              | <br> | <br> | 199                                   | 140   | 4                      | 6         | 203   | 146   |
| Children vaccinated   | <br> | <br> | 3,034                                 | 1,925 | 507                    | 232       | 3,541 | 2,157 |
| Negative reactors not |      | <br> | 63                                    | 38    | 19                     | 10        | 82    | 48    |

Some 8 maintained and grant aided schools were visited twice during the year, which brings the total actual visits paid to schools to 80.

The acceptance rate for B.C.G. vaccination for 1966 was 78.6 per cent.

In addition a special survey was made at one school where children had been in contact with a known case of Tuberculosis:

|                     |        | Positive | Negative | Not  | Negative Reactors |
|---------------------|--------|----------|----------|------|-------------------|
|                     | Tested | Reactors | Reactors | Read | Vaccinated        |
| Children (all ages) | 107    | 35       | 72       | _    | _                 |

N.B.—These figures are not included in the table above.

\*The majority of the negative reactors were pupils under 13 years of age and therefore too young for vaccination; they will be retested when they reach 13 years of age. Also included in the above figures are 8 children who were missed at a survey done in 1965 and who were subsequently seen early in 1966.

Mass Radiography.—Appointments for chest x-ray by Mass Radiography are offered to all positive reactors and also to their home contacts. In addition, those pupils who have had large Mantoux positive reactions (induration 15 mms. and above) have follow-up X-rays four months and sixteen months after their initial chest X-ray.

During 1966 some 125 children with large positive reactions were referred for follow-up X-rays.

The table below summarises the results of all cases investigated by the Stoke-on-Trent and Wolverhampton Mass Radiography Units:

| Cases investigated                  | <br>602 | 212 | Staff<br>177 |
|-------------------------------------|---------|-----|--------------|
| Recalled for large film examination | <br>5   | 8   | 3            |
| Cases of tuberculosis discovered    | <br>-   | 2   | _            |

(Included in the above figures are 357 children and 166 staff, from the schools at which special surveys were made. Three children and three members of staff were recalled for large film examination).

The two cases found among the home contacts were notified as suffering from active pulmonary tuberculosis following X-ray as contacts of their children who had Mantoux positive reactions.

#### DIPHTHERIA IMMUNISATION

Routine Medical Examination Sessions in school give the School Medical Officers opportunity to check on the children's state of protection against Diphtheria, to urge the importance of immunisation and to get parental consent to its promotion and maintenance. School Nurses, Health Visitors and District Nurses, who in the course of their duties discover school children who have missed immunisation, also endeavour to obtain the necessary parental "consents." Propaganda methods, including the display of posters, are also used from time to time to remind the public of the importance of immunisation.

During 1966, the total number of children of school age who were primarily immunised was 732; of this number 646 were treated by School Medical Officers and 86 by general medical practitioners.

Children immunised against Diphtheria in infancy should have a reinforcing injection after an interval of three or four years and School Medical Officers at routine medical inspections advise this in appropriate cases.

Unfortunately, due to the demand for poliomyelitis vaccination between 1957 and 1962 and to the demand for smallpox vaccination in 1962, there was a decline in the numbers of children receiving booster doses against diphtheria. In order to rectify this, a new procedure was started during the Autumn Term, 1963. Under this scheme consent forms are issued to parents of 5 and 11 year olds annually at each school. In addition to protection against diphtheria, primary immunisation or boosters against tetanus and poliomyelitis were offered to 5 year olds. Children aged 11 years were offered booster or primary immunisation against diphtheria and tetanus, and revaccination against smallpox: parents have the choice of their children being given the necessary doses either at school or by their family doctors.

Of 5,502 school children given "booster" doses in 1966, some 4,486 were dealt with by the School Medical Officers and 1,016 by general medical practitioners.

The effects of the immunisation campaign are demonstrated by the following table showing the incidence of, and deaths from, Diphtheria among persons of all ages in the County during the past twenty years.

|               |                         | 1947—51 | 1952—56   | 1957—61 | 1962—66 |  |
|---------------|-------------------------|---------|-----------|---------|---------|--|
| Notifications | Total<br>Annual average | 25<br>5 | 1 0.2     | 1 0.2   | =       |  |
| Deaths        | Total<br>Annual average | 3 0.6   | 1*<br>0.2 | =       | =       |  |

<sup>\*</sup>Death of elderly woman, assigned by Registrar-General; C. diphtheria not found.

## VACCINATION AGAINST SMALLPOX

During the year, 251 children between the ages of 5 and 14 years were vaccinated against Smallpox. Of this number, 164 vaccinations were performed by School Medical Officers and 87 by general medical practitioners.

In addition, 991 children were re-vaccinated, 732 by School Medical Officers and 259 by general practitioners.

#### VACCINATION AGAINST POLIOMYELITIS

Both Sabin (oral )and Salk (injection) vaccines continued to be available, but the former was the more widely used almost to the exclusion of the latter.

Some 566 children between the ages of 5 and 15 years received primary vaccination during the year and, of these, 401 were dealt with by County Council Medical Officers while the remaining 165 received their doses from General Practitioners.

In addition, a further 3,665 children in the same age group were given fourth (or booster) doses, 2,780 by County Council Medical Officers and 885 by General Practitioners.

### IMMUNISATION AGAINST TETANUS

Of the 2,760 children who received primary immunisation against tetanus, 2,512 were dealt with by School Medical Officers and the remaining 248 by general practitioners. Of a further 4,772 children who received booster doses of tetanus antigen mainly in conjunction with diphtheria boosters by means of combined vaccines, 3,371 were immunised by School Medical Officers and 1,401 by Practitioners.

#### HEALTH EDUCATION

The demand for illustrated talks continues to increase and to be intensified by the success of the new "Personal Relations" venture. All requests for talks have been met and there is again a considerable increase in the numbers of talks delivered.

During the year in the course of their normal duties, School Medical Officers, Dental Officers and Health Visitors visit schools in the County and give talks on health subjects. Visual aids, films, filmstrips, slides and flannelgraphs, together with leaflets and posters or display panels, are available. This applies to all schools whether or not they are provided with projection facilities.

The most popular topics have been general health and hygiene, nutrition, grooming, care of person, teeth, feet, food hygiene, and more specialist subjects such as parenteraft, smoking, venereal diseases and safety in the home.

"Learning to Live"—Help is afforded to adolescents by the offer of sex education programmes involving some explanation and discussion of "growing up" problems. This particular service is offered to schools and is undertaken at the instance of headmasters and headmistresses. The basic programme is fundamental to all schools, but its application is individual and governed by the special needs of the pupils and schools who accept it. It cannot be too strongly emphasised that this "Learning to Live" programme is complementary to the efforts of parents and teachers alike to educate their children for life in the modern world.

Where Heads of Secondary Schools have requested sex education programmes the courses are arranged by Mrs. Jean Owen, who is a professional teacher recruited to the staff of the County Health Department for this express purpose.

The complete course consists of three visits to each school and Mrs. Owen can call upon a Medical Officer for one of the three meetings if requested. She is also aided by Mr. H. Harris who has charge of any visual aids which may be required for the programme.

The first meeting is introduced by the showing of a modern film "Learning to Live" produced by the London Foundation for Marriage Education. This is a most useful and sensitive film, greatly appreciated by both boys and girls, which gives not only the biological facts of reproduction but also touches upon aspects of personal relationships, responsibility and questions of morality.

Questions submitted by the pupils at this first meeting form the basis for the succeeding meetings which are best conducted in smaller groups as free discussion is a most valuable part of this course. In fact, one of the conclusions which one formulates as the scheme progresses, is that these young people find discussion in their own age group, under an outside chairman, a most helpful measure—their individual problems and those of their friends when brought out and discussed seem to help them to get life's complexities into focus.

The pressures of the adult world, relentlessly applied through the mass media, bring to these young people the necessity of resolving their personal patterns of behaviour at an earlier age than, perhaps, ever before.

One finds that these boys and girls have few inhibitions in discussing problems of sexual behaviour, and modern morality, provided that the adult in charge is prepared to meet them with an equally straightforward approach.

Another welcome development of this work is the increasing interest shown by Parent-Teacher Associations. Heads of schools are asked to inform the parents of pupils who are to receive these lectures so that if they so wish, pupils may be withdrawn.

In presenting this course to the Secondary Schools of Shropshire, we hope that we are able to help the teachers to open a window on this adult world and its problems, to help the boys and girls to solve some of their own and to achieve the emotional maturity which we all need for a happy life, before and after we leave school.

Smoking and Health.—Research and all the available statistical evidence indicates that there is a definite correlation between the smoking of cigarettes and the incidence of lung cancer, and on grounds of general health we do all that is possible by personal example and by the giving of information to discourage the formation of the smoking habit in youth and to curtail it in the addicted among the older generation.

Some Heads of Schools have felt that talks devoted entirely to smoking were undesirable because they tended to give undue emphasis to the practice and might well stimulate interest and experiment among those in whom the reverse reaction was intended but School Medical Officers are nevertheless expected to take every opportunity of pointing out to children the ill-effects of indulging in habits which are calculated to undermine good health.

In this County we have supported the Ministry of Health's anti-smoking campaign:

- (a) by a programme of talks and the showing of films and slides in schools, available on request;
- (b) by displaying posters in clinics, council premises and elsewhere by distributing leaflets;
- (c) by offering talks to organised groups.

#### PHYSICAL EDUCATION

The following report has been provided by Mr. J. W. Beswick, Physical Education Adviser:

Shropshire Schools' Field Centre at Arthog.—The Schools' Field and Adventure Centre was again over-subscribed this year; some 250 pupils and staff had to be disappointed.

The total attendance this year was 1,200 pupils and staff.

The range of activities undertaken by the schools, continues to widen, from seashore ecology, surveying, land erosion to potholing, caveing and sailing, in addition to the exploration of mountains.

It is hoped by future development to make this into an "All Year Round" centre. All the children attending the centre at Arthog are examined before departure by a School Medical Officer and must be certified free from infection and verminous infestation before being allowed to proceed. Arrangements are made with a local medical practitioner to provide medical services at the centre when needed.

Swimming.—New baths at Much Wenlock, Pontesbury and Worfield, added to the present number, means the use of some twenty-four baths.

In consequence of this, more children have been able to take swimming. L.E.A. awards increased by an extra 30%, A.S.A. survival awards by 60% and R.L.S.S. awards by 40%. More baths to be built at schools are proposed for the future.

The two "clinics" held every week-end for the "elite" swimmers continue and are proving their worth by the better performances at County and Inter-County level.

**Duke of Edinburgh's Award.**—The number of new entrants into the Scheme this year were 414 boys, 204 girls. Adding these to pupils already participating would make a grand total of over 1,200 pupils.

120 boys gained awards, 11 of them went to Buckingham Palace to receive gold awards.

52 awards were gained by girls, but at the moment none has reached the gold stage.

Shropshire Schools' Sports and Athletics Association.—This association since last year has added to its list, archery, table tennis, badminton, trampolining and gymnastics. They now, therefore hold Area, County and Inter-County Competitions in twenty-five sports and games.

Very many more pupils are now able to compete in high level competition at National and International level.

Physical Education.—Although we still receive a few criticisms about "bare foot" work, these criticisms get less and less as parents find the beneficial effects of mobility of the feet worthwhile.

The advent of new halls, changing and washing accommodation in our new primary schools enables many more children to make the most of the opportunity of taking part in this activity.

#### SCHOOL CANTEENS

Medical Examination of Staff.—In order to ensure as far as possible that those engaged in the School Meals Service are not suffering from, or carriers of, infectious diseases liable to be transmitted by contamination of the food served in the canteens, the medical examination of canteen staffs is carried out at least once a year, and new entrants to the service are examined as soon as possible and also given chest X-ray examinations. They should be examined before commencing employment; often the worker's services are urgently required and prior examination is not considered possible, but this is potentially dangerous practice.

These medical examinations are directed towards establishing the cleanliness of the person, clothing and hands of those employed in the preparation or handling of food; and the absence of infectious conditions such as septic skin lesions, discharging ears and chronic catarrh and other conditions such as eczema or other forms of dermatitis.

If on initial examination an employee is found to have a history or shows symptoms of intestinal disorder, arrangements are made for specimens of faeces, and if necessary urine, to be submitted to the Public Health Laboratory, Shrewsbury, for investigation.

The following particulars give some indication of this work during the year:

#### KITCHENS AND SCHOOL CANTEENS

| Premises  | Personnel Employed |              |                |                  |                  |                     |  |  |  |
|---|--------------------|--------------|----------------|------------------|------------------|---------------------|--|--|--|
| Fremises  | Supervisors        | Cooks        | Helpers        | Others           | Total            |                     |  |  |  |
| Central Kitchens Self-contained Canteens Canteens for dining only | 11<br>143<br>151   | 11<br>6<br>— | 27<br>202<br>— | 96<br>615<br>315 | 13<br>307<br>203 | 147<br>1,130<br>518 |  |  |  |
| TOTAL   | 305                | 17           | 229            | 1,026            | 523              | 1,795               |  |  |  |

During 1966 a total of 1,622 examinations of canteen personnel (337 initial and 1,285 re-examinations) was carried out.

In thirteen cases it was necessary to arrange for special chest X-ray examinations and the results in all these cases were satisfactory. X-ray examinations are made when the Miniature Mass Radiography Unit is in the area, or can be arranged specially at the request of the Medical Officer.

Two employees who were contacts of cases of dysentery and food poisoning respectively were suspended from duty for the appropriate period recommended in Ministry of Health Regulations, and allowed to resume after a series of faecal specimens submitted for bacteriological examination had proved to be satisfactory. Another canteen employee who was a contact of a case of infective hepatitis was likewise suspended from duty, but subsequently pronounced fit to return to work.

This scheme has been extended to include personnel engaged in the preparation and handling of foodstuffs at the Boarding Schools and Hostels in the County.

#### SANITARY CIRCUMSTANCES OF THE SCHOOLS

In 1954 School Medical Officers completed comprehensive inspection reports on all the school premises in the county making notes on the sanitary arrangements, water supply, washing accommodation, canteens, heating, lighting and ventilation. On the occasion of each annual routine medical inspection the premises are re-inspected and matters which require attention or investigation are referred to the Chief Education Officer with a view to their being dealt with by the Education Works Committee.

#### GENERAL

Meals.—School canteen meals are available at 1/- per head (free in necessitous cases) for one hundred per cent of children attending school; 78.1 per cent were having school dinners at a census taken in September, 1966; in September, 1965, the figure was 74.7 per cent.

Milk.—Milk is supplied free of charge in all schools and a census taken in September, 1966, showed that 73.6 per cent of the children were drinking it.

Quality of Milk Supplies.—As far as possible only Pasteurised Milks are supplied; of a total of 288 departments in maintained schools, 287 had pasteurised supplies and 1 an untreated supply in 1966.

Investigation of Milk Supplies.—The County Public Health Inspectors are responsible for the supervision of school milk supplies and samples for testing are obtained by Sampling Officers of the County Health Department. Methylene Blue colour tests to determine the keeping quality and, in the case of Pasteurised milk, Phosphatase tests to determine whether the milk has been properly processed, are carried out on milk from each supplier at regular intervals.

The table below gives the results of the examination of samples taken during 1966:

| Grade of Milk Samples    |  | Met              | hylene Blue Test | Phosphatase Test |       |              |          |
|--------------------------|--|------------------|------------------|------------------|-------|--------------|----------|
| Grade of Wilk            |  | Samples<br>taken | Satisfactory     | Unsatis.*        | Void† | Satisfactory | Unsatis. |
| Pasteurised<br>Untreated |  | 87<br>4          | 82<br>2          | 4 2              | 1 _   | 87           | =        |
| TOTAL                    |  | 91               | 84               | 6                | 1     | 87           | _        |

\*In the cases of the samples failing the Methylene Blue Test follow up samples were taken, and these proved to be satisfactory.

†Methylene Blue tests are declared void when the atmospheric shade temperature exceeds 65°F, during storage in the laboratory.

Medical Examination of Prospective Teachers.—During 1966, the medical staff of the School Health Service examined 283 candidates for entry to the teaching profession.

## STATISTICAL TABLES

(i.e. as submitted to the Department of Education and Science on Form 8.M)

TABLE I (A) PERIODIC MEDICAL INSPECTIONS

|   |                                  |              | ondition of<br>ted (nutrition) | Pupils found to require treatment (excluding denta<br>diseases and infestation with vermin) |   |                               |  |  |
|---|----------------------------------|--------------|--------------------------------|---|---|-------------------------------|--|--|
| Age Groups<br>inspected<br>(By year of birth) | Number<br>of Pupils<br>Inspected | Satisfactory | Un-<br>satisfactory            | For defective<br>vision (excluding<br>squint)   | For any other<br>condition<br>recorded at | Total<br>Individual<br>pupils |  |  |
| (b) year or ortin)                            | Inspected                        | No.          | No.                            | squiit)   | Part II                                   |                               |  |  |
| (1)   | (1) (2) (3)                      |              | (4)                            | (5)   | (6)                                       | (7)                           |  |  |
| 1962 and later                                | 20                               | 20           |                                |   | _   | _                             |  |  |
| 1961  | 1,885                            | 1,885        | -                              | 20  | 74  | 94                            |  |  |
| 1960  | 2,551                            | 2,551        | _                              | 33  | 64  | 97                            |  |  |
| 1959  | 423                              | 423          | _                              | 6   | 15  | 21                            |  |  |
| 1958  | 203                              | 203          | -                              | 6   | 2   | 8                             |  |  |
| 1957  | 150                              | 150          |                                | 9   | 6   | 15                            |  |  |
| 956   | 130                              | 130          | _                              | 3   | 5   | 8                             |  |  |
| 1955  | 699                              | 699          |                                | 34  | 27<br>71                                  | 59                            |  |  |
| 1954  | 1,756                            | 1,756        | _                              | 57  |   | 128                           |  |  |
| 1953  | 838                              | 838          | _                              | 32  | 36  | 68                            |  |  |
| 1952  | 1,574                            | 1,574        |                                | 83  | 66  | 149                           |  |  |
| 1951 and earlier                              | 1,867                            | 1,867        | -                              | 102   | 46  | 148                           |  |  |
| TOTAL   | 12,096                           | 12,096       | _                              | 385   | 412                                       | 795                           |  |  |

Note: (i) Routine medical examinations are normally carried out on entry to school, at 11 years of age and again at 14 years.

(ii) Columns 5, 6 and 7, relate to individual pupils and not to defects. Consequently the total in column (7) is not necessarily the sum of columns (5) and (6).

#### (B) OTHER INSPECTIONS

 Special Inspections
 ...
 1,603

 Re-inspections
 ...
 10,535

 12,138\*

Also approximately 1,000 visits per annum are made by School Medical Officers to the homes of handicapped pupils for special examination, re-examination and parent guidance purposes, etc.

## (C) INFESTATION WITH VERMIN

| (1) | Total number of example of example of the control o | minatio  | ons in th | he sch | ools by | the Sc   | hool N  | urses o | or othe  | r autho  | rised p  | ersons |       | 101,252 |
|-----|--|----------|-----------|--------|---------|----------|---------|---------|----------|----------|----------|--------|-------|---------|
|     | Total number of indi   |          |           |        |         |          |         |         |          |          |          |        |       | 1,048   |
| (3  | Number of individua  | l pupils | in resp   | ect of | whom o  | cleansin | g notic | es were | e issued | (Section | on 54(2) | , Educ | ation |         |
|     | Act, 1944)   |          |           |        |         |          |         |         |          |          |          |        |       | 32      |
| (4  | Number of individual   | pupils   | in resp   | ect of | whom o  | leansin  | g order | s were  | issued   | (Sectio  | n 54(3), | Educa  | tion  |         |
|     | Act, 1944)   |          |           |        |         |          |         |         |          |          |          |        |       | 14      |

TABLE II

# RETURN OF DEFECTS FOUND BY MEDICAL INSPECTIONS IN THE YEAR ENDED 31st DECEMBER, 1966 PERIODIC AND SPECIAL INSPECTIONS

| Defect                        | Defect or Disease  | Ent                     | rants                                 | Lea                   | ivers                              | Oti                            | hers                                | To                                | otal                                    | Special in              | spections                       |
|-------------------------------|--|-------------------------|---------------------------------------|-----------------------|------------------------------------|--------------------------------|-------------------------------------|-----------------------------------|---|-------------------------|---------------------------------|
| Code                          | Defect of Disease  | Requ                    | iring:                                | Requ                  | iring:                             | Requ                           | iring:                              | ng: Requiring:                    |   | Requiring:              |                                 |
| No.                           | (2)  | Treat-<br>ment<br>(3)   | Observation (4)                       | Treat-<br>ment<br>(5) | Observation (6)                    | Treat-<br>ment<br>(7)          | Observation (8)                     | Treat-<br>ment<br>(9)             | Observation (10)                        | Treat-<br>ment<br>(11)  | Observation (12)                |
| 4<br>5<br>6                   | Skin   | 53<br>23<br>5<br>3<br>5 | 161<br>587<br>135<br>41<br>242<br>223 | 38<br>185<br>10<br>   | 108<br>465<br>38<br>20<br>57<br>44 | 47<br>147<br>21<br>2<br>5<br>7 | 132<br>537<br>78<br>37<br>136<br>70 | 103<br>385<br>54<br>7<br>16<br>15 | 401<br>1,589<br>251<br>98<br>435<br>337 | 52<br>12<br>5<br>—<br>1 | 26<br>76<br>24<br>7<br>48<br>20 |
| 7<br>8<br>9<br>10<br>11<br>12 | (c) Other  | 23<br>7<br>1            | 52<br>716<br>125<br>369<br>72<br>250  | 13<br>2<br>1<br>—     | 14<br>131<br>19<br>22<br>47<br>54  | 5<br>1<br>-<br>1<br>9          | 25<br>286<br>38<br>87<br>45<br>115  | 3<br>41<br>10<br>2<br>2<br>18     | 91<br>1,133<br>182<br>478<br>164<br>419 | 3<br>5<br>—<br>1        | 10<br>76<br>32<br>31<br>7<br>18 |
| 13                            | Development:  (a) Hernia  (b) Other  Orthopaedic:  (a) Posture | 6                       | 25<br>118<br>21                       | 5<br>6                | 3<br>34<br>25                      | 4<br>1                         | 9<br>86<br>23                       | 16<br>13<br>2                     | 37<br>238<br>69                         | =                       | 7<br>11                         |
| 14                            | (b) Feet (c) Other Nervous System: (a) Epilepsy                | . 5                     | 227<br>152<br>22<br>24                | 8 4                   | 100<br>80                          | 16<br>16<br>—                  | 156<br>93<br>18<br>24               | 35<br>25                          | 483<br>325<br>49<br>69                  | 2 2                     | 30<br>30<br>4<br>7              |
| 15                            | (b) Other  | _                       | 75<br>174                             | 3                     | 21<br>41<br>36                     | 8 2                            | 69                                  | 11 5                              | 185<br>321                              | =                       | 113                             |
| 16<br>17                      | Abdomen Other  | . 4                     | 79<br>45                              | 1 7                   | 33<br>59                           | 2<br>2<br>7                    | 88<br>51                            | 7<br>18                           | 200<br>155                              | 2 2                     | 13<br>11                        |

<sup>\*</sup>In addition to those inspected a total of 2,908 pupils in 7/8 year old groups, were given Vision tests. Of this total, 40 were recommended for treatment and 148 for observation.

## TABLE III

# (A) EYE DISEASES, DEFECTIVE VISION AND SQUINT

|  | Number of<br>cases dealt with |
|--|-------------------------------|
| External and other, excluding errors of refrac-<br>tion and squint | 10<br>4,044                   |
| TOTAL  | 4,054                         |
| Number of pupils for whom spectacles were prescribed               | 3,936                         |

## (B) DISEASES AND DEFECTS OF EAR, NOSE AND THROAT

|  | Number of<br>cases dealt with |
|--|-------------------------------|
| Received operative treatment:  (a) for diseases of the ear   | 20<br>432<br>34<br>1          |
| TOTAL  | 487                           |
| Total number of pupils in schools who are known to have been provided with hearing aids: (a) in 1966 | 27<br>151                     |

## (C) ORTHOPAEDIC AND POSTURAL DEFECTS

|   | Number of<br>cases dealt with |
|---|-------------------------------|
| Number of pupils known to have been treated at clinics or out-patients departments  Number of pupils treated at school for postural | 239                           |
| defects   | 22                            |
| TOTAL   | 261                           |

## (D) DISEASES OF THE SKIN (excluding Uncleanliness, for which see Part C of Table I)

|            |      |       |       | Number of defects treated or<br>under treatment during year |
|------------|------|-------|-------|---|
| Ringworm:  | (i)  | Scalp | <br>  | <br>2   |
|            | (ii) | Body  | <br>  | <br>11  |
| Scabies    |      |       | <br>  | <br>6   |
| Impetigo   |      |       | <br>  | <br>18  |
| Other skin | dise | ases  | <br>  | <br>42  |
|            |      |       | TOTAL | <br>79  |

## (E) CHILD GUIDANCE TREATMENT

Number of pupils treated at Child Guidance Clinics under arrangements made by the Authority . . 455

## (F) SPEECH THERAPY

| Number of pupils treated by Speech Therapists |  |  |  |  |  |  |  |  | 273 |
|---|--|--|--|--|--|--|--|--|-----|
|---|--|--|--|--|--|--|--|--|-----|

## (G) OTHER TREATMENT GIVEN

|                            |        |          |       |     | Number of<br>cases dealt with |
|----------------------------|--------|----------|-------|-----|-------------------------------|
| (a) Miscellaneous Minor    | 65     |          |       |     |                               |
| (b) Pupils who received co | nvaies | cent tre | atme  | nt  | 10                            |
| under School Health        | 10     |          |       |     |                               |
| (c) Pupils who received B  |        | Vaccin   | ation |     | 3,034                         |
| (d) Other treatment given  | :      |          |       |     |                               |
|                            |        |          |       |     | 4                             |
| Asthma                     |        |          |       |     | 21                            |
| Bronchitis                 |        |          |       |     | 8                             |
| Cardiac Condition          | S      |          |       |     | 12                            |
| Diabetes                   |        |          |       |     | 4                             |
| Epilepsy                   |        |          |       |     | 7                             |
| Hernia                     |        |          |       |     | 10                            |
| Nephritis                  |        |          |       |     | 3                             |
| Pneumonia                  |        | * *      |       |     | 3 2                           |
|                            |        | * *      |       | *** | 2                             |
| Rheumatism                 | >      |          |       |     | 2                             |
| Rheumatic Fever            |        |          |       |     | 0                             |
| Tubercular Condit          | ions   |          |       |     | 9                             |
| Miscellaneous              |        |          |       |     | 190                           |
|                            | TOTAL  | (a)      | (d)   |     | 3,381                         |

