[Report 1921] / School Medical Officer of Health, Liverpool.

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CITY OF LIVERPOOL.

EDUCATION COMMITTEE.

REPORT

ON THE

MEDICAL INSPECTION OF SCHOOL CHILDREN

FOR THE YEAR

1921.

BY

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APPENDICES :—

CITY OF LIVERPOOL.

EDUCATION COMMITTEE.

REPORT of the MEDICAL OFFICER to the Education Authority for the Year ended 31st December, 1921.

The Medical Officer begs to submit the following Report of the work of the School Medical Service for the year ended 31st December, 1921.

No additions have been made during the year to the medical staff, though two vacancies arising from the resignations of Dr. Richardson and Dr. Belam were filled by the appointments of Dr. Mary McHugh and Dr. Margaret Ormiston.

The full requirements of the Board with regard to the inspection of the children, attending both Elementary and Higher Schools, were complied with and arrears of work were overtaken.

The following new Clinics were opened during the year:—

(1) A Minor Ailments Clinic and Defective Vision Clinic in Green Lane, Old Swan, to replace the Clinic in Derby Lane, closed in December, 1920.

(2) A Minor Ailments Clinic at St. Dunstan's Parish Hall, off Earle Road, replacing the Clinic off Lodge Lane, which was closed in the summer of 1920.

(3) A Dental Clinic at the Netherfield Road Tuberculosis Institute.

(4) An Aural Clinic at the North Dispensary, Vauxhall Road.

The nursing staff has been supplied by the Health Committee, with the exception of the work at the Minor Ailments Clinics at the North Corporation School and at Garston, and the visitation of certain Garston Schools, this work being carried out by District Nursing Associations.

The Health Committee's staff working for the Education Committee numbered 37, of whom 19 were working more or less constantly at the various Clinics, and 18 were detailed off for assisting the Medical Officers in the schools and following-up at the homes. This number has proved to be insufficient as, in view of the additional inspections required by the Board of Education, the extent of the work during the year increased without any increase in the numbers of the nursing staff.

There were at the end of the year 161 Public Elementary Schools, with an average number on the rolls for the year of 139,548, and an average attendance of 123,320 or 88·4 per cent., the highest average since 1913.

The School Medical Officers have during the year carried out 135,492 examinations relating to 86,030 Elementary and Higher School children, as shewn in more detail below :—

Public Elementary Schools.

Routine examinations	43,469
Special examinations	13,795
Re-inspections	72,282
Total number of inspections	129,546
Number of individual children inspected	82,444

Higher Schools.

Routine examinations	2,668
Special examinations	287
Re-inspections	2,991
Total number of inspections	5,946
Number of individual children inspected	3,586

PUBLIC ELEMENTARY SCHOOLS.

Personal Hygiene.

The experiences of the Doctors and School Nurses continue to shew much want of knowledge on the part of parents and children of the rudiments of domestic economy and hygiene. To quote a few examples: many parents believe that a child is not healthy without pediculi in the head; others consider that they breed spontaneously owing to "a poor state of the blood."

The diet is frequently inappropriate, consisting too largely of tea, bread and margarine, cakes, and chip potatoes.

Late hours are prevalent, irrespective of any Summer Time Act. In an enquiry made during the year as to the effects of Summer Time upon the health of the children it was found that, in order to induce the children to go to bed (and even to school), bribery with pence was very prevalent.

Cleanliness and clothing are matters to which, in certain families, but little consideration is given, repairs to clothing, if done at all, being effected by means of pins and pieces of string. The school medical inspection has, however, considerably helped the teachers in raising and maintaining the standard of cleanliness.

An enquiry into the teaching of Hygiene is being conducted by the Education Committee. There can be no doubt that considerable improvement in the health, outlook and happiness of the

rising generation results, where adequate attention is paid to this subject, and lessons on cleanliness, fresh air, clothing, diet, etc., are sufficiently emphasised.

Heights and Weights.

In the Annual Report for 1917 there were given the weights of children due for routine examination in certain selected but typical schools, in poor, fair and good neighbourhoods, and comparison was made with the weights recorded for the same schools in 1914. The result of the comparison was to shew that, speaking generally, there was an all round improvement of the children, particularly in the poorer districts.

Particulars have been obtained for 1921 of the heights and weights of children attending the same schools as were previously compared, a few additional fair and good schools being added in order to make the numbers of each group sufficiently large for comparative purposes. The following tables give the comparison of the weights for the three years, with the heights of the children for 1921. The figures for the eight year old group are available for the first time.

The weights, except in the case of boys of 12 and girls of 6 from poor neighbourhoods shew a distinct improvement on both the 1914 and 1917 figures. These observations would seem to be borne out by the reports of the School Medical Officers that the nutrition of the children generally was satisfactory.

So far as the heights are concerned, the averages shewn in the table are, with the exception of the boys at 13-14, almost identical with the averages shewn in the Annual Report for 1914 for all schools. The boys at 13 are slightly smaller than the average in 1914. The figures for the schools in good, fair and poor neighbourhoods for 1914-1917 were not available for comparison purposes.

Table A.—WEIGHTS—(Recorded in Pounds)

BOYS.

Neighbourhood.	5—6			6—7			8—9	12—13			13—14		
	1914	1917	1921	1914	1917	1921	1921	1914	1917	1921	1914	1917	1921
Good	37·7	38·4	40·4	40·8	41·4	42·55	52·40	69·7	69·7	73·45	75·2	70·3	78·25
Fair			39·1			42·60	50·90			70·65			76·70
Poor	36·6	37·5	39·55	39·2	39·7	40·85	50·35	67·0	67·7	66·55	67·5	72·5	72·75
Average	37·15	37·95	39·60	40·0	40·55	42·00	51·20	68·35	68·7	69·70	71·35	71·40	75·40

GIRLS.

Neighbourhood.	5—6			6—7			8—9	12—13			13—14		
	1914	1917	1921	1914	1917	1921	1921	1914	1917	1921	1914	1917	1921
Good	37·0	38·4	39·1	40·3	40·3	41·95	51·85	70·8	71·2	74·15	80·5	76·9	81·50
Fair			38·0			40·75	49·70			75·50			78·10
Poor	36·2	36·8	37·50	40·6	38·8	39·40	48·80	67·5	68·6	69·90	73·4	74·1	77·95
Average	36·6	37·6	38·25	40·45	39·55	40·70	50·00	69·15	69·9	73·10	76·95	75·5	79·90

BOYS—1921.

Neighbourhood.	5—6	6—7	8—9	12—13	13—14
Good	41·85	43·20	47·65	54·85	55·85
Fair	41·25	42·50	47·50	53·70	55·45
Poor	40·45	41·65	45·90	53·00	54·05
Average	41·15	42·45	47·00	53·70	54·95

GIRLS—1921.

Neighbourhood.	5—6	6—7	8—9	12—13	13—14
Good	41·35	42·95	47·55	55·10	57·10
Fair	40·75	42·15	46·70	54·30	56·25
Poor	39·80	41·20	45·85	53·15	54·60
Average	40·65	42·05	46·65	54·15	55·90

Uncleanliness.

Amongst the routine cases examined a verminous condition of the heads requiring treatment was reported in 5,423 cases, or 12·5 per cent.; this represents 19·6 per cent. of the girls and 5·2 per cent. of the boys, that is, approximately four times as many cases amongst girls as amongst boys. This proportion is similar to that reported in previous years, but the percentage of neglected heads is only about half of that recorded about eight or nine years ago.

So far as the body and clothing were concerned, 2,876 children, or 6·6 per cent., were reported unclean, the proportion of boys and girls being approximately the same.

In all, the Nurses made 117,306 examinations or re-examinations for cleanliness during the year, and found 11,056 children unclean. In many cases one or more children in a family are found over and over again in a verminous or dirty condition: this necessitates more or less constant supervision even though temporarily the condition may have been remedied.

As in previous years the cases are visited at the homes by the School Nurses of the Health Committee's staff, and these officials take any action that may be necessary under Section 35 of the Liverpool Corporation Act, 1913. During the year 133 statutory notices calling upon parents to cleanse their children were served, 87 children being cleansed by the parents and 46 by the staff. It was not found necessary to take legal proceedings in any cases.

During the year 9,859 children were cleansed, either voluntarily or compulsorily, at the two Cleansing Stations, 4,457 being cleansed at Mansfield Street and 5,402 at Beacon Street, these being a slight falling off from the 1920 figures.

In the Liverpool Corporation Act, 1921, certain important additions to the powers previously secured were granted by

Parliament. Under the new powers it will be possible to inflict a fine of 10/- on the parent or guardian for failing to comply with the first notice within 24 hours.

Certain verbal alterations in the old clause were also secured, viz., (*a*) the substitution of the word "infected' as is found in Section 122 of the Children Act for "infested," and (*b*) the use of the words "an unclean condition" instead of "a foul or filthy condition."

Both alterations render the statutory notice less objectionable to the parents or guardians, and the offence less difficult to prove before a magistrate should it become necessary to take a case into Court.

The Section, which comes into force on April 1st, 1922, reads as follows:—

> 460.—(1) The Medical Officer or any person provided with and if required exhibiting the authority in writing of the Medical Officer may examine the person and clothing of any child (other than children in boarding schools including reformatory and industrial schools) and if on examination the Medical Officer or any such authorised person as aforesaid shall be of opinion that the person or clothing of any such child is infected with vermin or is in an unclean condition the Medical Officer may give notice in writing to the parent or guardian or other person who is liable to maintain or has the actual custody of such child requiring such parent guardian or other person to cleanse the person and clothing of such child within twenty-four hours after the service of such notice. In any such notice it shall be sufficient to designate the person to be served as the parent guardian or other person liable to maintain or having the actual custody of the child whose person or clothing requires to be cleansed.

(2) If the person to whom any such notice as aforesaid is given fails to comply therewith within the prescribed time he shall on summary conviction be liable to a fine not exceeding ten shillings and the Medical Officer or some person provided with and if required exhibiting the authority in writing of the Medical Officer may remove the child referred to in such notice and may cause the person and clothing of such child to be properly cleansed in suitable premises and with suitable appliances and if necessary for that purpose may without any warrant other than this Act convey to such premises and there retain such child until such cleansing is effected.

(3) Where after the person and clothing of a child has been cleansed under this section the parent or guardian or other person liable to maintain the child allows him to get into such a condition that it is again necessary to proceed under this section the parent guardian or other person shall on summary conviction be liable to a fine not exceeding ten shillings.

(4) The examination or cleansing of females under this section shall only be effected either by a person duly qualified as a medical practitioner or by a female person being a member of the staff of the Medical Officer.

(5) For the purpose of this section the expression "child" means a person under the age of fourteen years.

During the year certain new methods of curing verminous infection, especially of the head, have come to the fore, and the prospect of controlling this most unpleasant condition is much more hopeful for the future. The placing upon the market of a special soap at a reasonable cost within easy reach of every parent, and the invention of a special steel comb, are two of the methods referred to. The latter is too expensive to be used by parents in the poorer districts, but is invaluable at Clinics and Cleansing Centres, and by its means the removal of nits from the hair is facilitated. The practice

ecently adopted in bad cases has been to encourage the parents to ttend the Cleansing Centres with their children, and to get them o remove with the special comb the nits from their children's heads. With regard to the special soap, experiments were carried out at he Minor Ailments Clinics and at the Cleansing Centres, and it was ound of real practical value in killing the lice and loosening nits, nd is now recommended for use in the homes. The soap contains high percentage of birch tar, a substance deleterious to the louse, whilst according to experiments carried out by Dr. Auden, of Birmingham, the soap has a lethal effect on the embryo in the nits n a large number of cases, though more than one application might e necessary to destroy all the viable embryoes.

Minor Ailments.

Included under this term are various skin diseases, minor injuries, ear diseases, external eye diseases, etc. Of these scabies, ringworm nd ear diseases are dealt with elsewhere in this Report. Of the remainder of the cases the School Medical Officers would see comparatively few were it not for the Minor Ailments Clinics, to which the teachers send a large proportion of the cases which come to their knowledge and are not receiving treatment elsewhere. One advantage of treatment at these Clinics is that by an arrangement of Time Cards it is possible to count the attendance at the Clinic as attendance at school. The Clinics, by providing regular and suitable treatment, prevent many cases from becoming sufficiently serious to cause absence from school, secure an early return to school in the case of absentees, and whilst treating the cases allow the Committee to continue to earn the Government Grant for school attendance.

The cases treated at the Clinics comprise impetigo and septic sores, which form nearly half the cases on the books, minor injuries such as cuts, bruises, abrasions, scalds or burns, ringworm of the body, certain other skin conditions, discharging ears and various external eye diseases.

Two Minor Ailments Clinics were opened during the year; one in Green Lane, Old Swan, in April, to replace the Clinic in Derby Lane which had been closed in the previous December, and the other in the St. Dunstan's Parish Hall, off Earle Road, in August, to serve the Smithdown Road area formerly catered for by the Lodge Lane Clinic. Both these Clinics have been well attended. There are now six Clinics in all, but the one at Erskine Street is worked in two independent sections.

The following Table shews the attendance at these different Clinics, and it will be seen that nearly 1,000 children are now in average attendance on school days. On the Saturdays the attendances dropped to 58·5, or 8·4 per Clinic, as against 154 per Clinic on the other days of the week. The Table also shews the maximum attendance at each Clinic on any one day during the year.

Table C.—Shewing Attendances, etc., at the Minor Ailments Clinics during the year ended 31st December, 1921.

Clinics.	New Cases.	Total No. of Attendances.	Average daily attendance.		Maximum attendances.
			Excluding Saturdays.	Saturdays only.	
North Corporation ...	2,955	36,001	168·8	9.5	300
Garston	1,562	21,927	102·2	8·9	183
St. Dunstan's ... ... (Opened 29/8/21)	1,083	10,712	133·3	12·0	210
Erskine Street ...	4,428	53,251	249·5	14·6	362
Old Swan ... ... (Re-opened 5/4/21)	1,201	15,701	93·4	6·7	173
St. Gabriel's	1,116	39,108	183·7	8·7	275
Totals for 1921 ...	14,345	176,700	930·9	60·4	—
Totals for 1920 ...	9,337	116,130	660	48·9	—
Totals for 1919 ...	6,539	80,123	—	—	—
Totals for 1918 ...	2,167	26,762	—	—	—

The opening of the Aural Clinic has been of distinct service in improving the efficiency of the Minor Ailments Clinics, as most of the ear cases under treatment there were referred to the Aural Clinic for detailed examination by the Specialist, and for advice as to the most suitable treatment to be adopted. By this means many were cured or improved in a short time, and were able to cease attendance at the Minor Ailments Clinics.

Certain districts in the North of the City, including Kirkdale, Walton and North Everton, still remain to be provided for, but the need for a Clinic in these neighbourhoods is not quite so great as in the districts already served.

Ringworm.

During the year there were 661 reported cases of Ringworm of the Scalp, as compared with 586 in 1920. After examination by the School Medical Officers 106 were found not to be genuine cases, the number of actual cases being, therefore, 555, as compared with 477 the previous year.

The following Table shews in percentages the duration of the verified cases outstanding at the end of the years 1919, 1920 and 1921:—

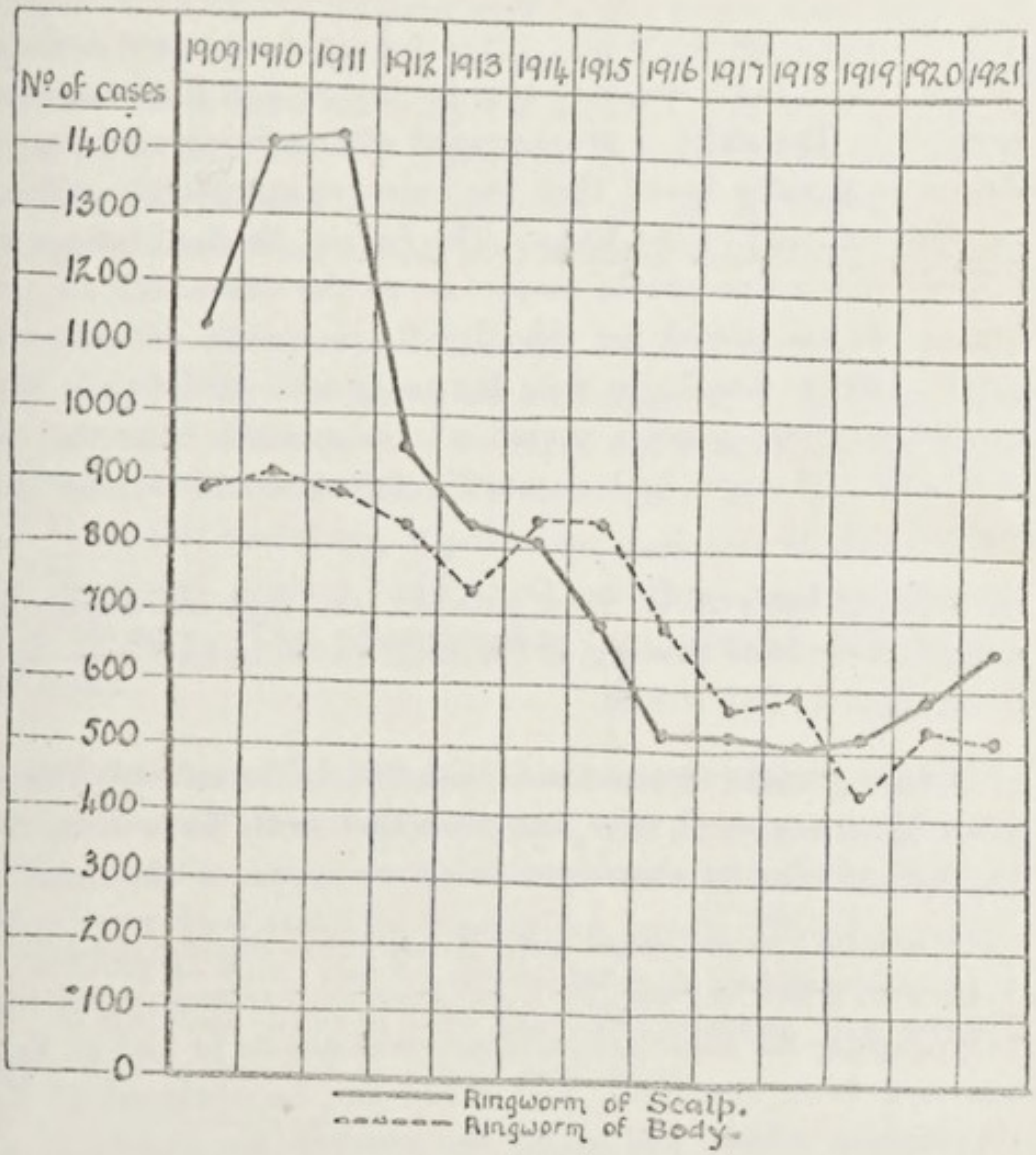
Duration.	1919.	1920.	1921.
Under 3 months	11·9	17·4	21·3
3 to 6 months	28·0	38·5	33·8
6 to 9 months	28·0	20·2	25·7
9 to 12 months	15·6	12·2	8·0
12 to 18 months	11·9	5·3	7·2
Over 18 months	4·6	6·4	4·0
	100·0	100·0	100·0

It is satisfactory to note the tendency towards a shorter duration of the disease.

All cases of Ringworm are seen as soon as possible after being reported, and again at intervals of a few weeks, with a view in the first case to diagnosis and later on to re-admission to school when fit. Cases suitable for X-ray treatment, and not able to afford treatment privately, are recommended for treatment at the Clinic. A much larger number of parents than usual asked for X-ray treatment, and the Clinic had to be opened on 50 occasions, 173 new cases being treated, as compared with 108 cases in 1920. It is probably this increase in the number of cases treated at the Clinic that has reduced the average duration of absence from school.

Owing to the close supervision which has been kept by the Medical Department over this disease during the past 10 years, the numbers have been considerably reduced, and compare favourably with those reported in other large towns. Thus, from the Annual Reports from seven of the largest towns, the number of cases of Ringworm in 1919 or 1920 per 10,000 in average attendance was as follows:— 136, 91, 195, 150, 67, 116, 310, whilst the number in Liverpool was 39 in 1920 and 46 in 1921.

The attached diagram shews the prevalence of Ringworm of the Scalp and Ringworm of the Body amongst school children in Liverpool since 1909, when the records were first kept. In that year the Education Committee insisted upon a medical certificate being produced before re-admission to school. This, however, did not check the disease, and at mid-summer, 1911, the certificates of the School Medical Officers only were accepted. The beneficial effects of this step were seen the following year, when there was a big drop in the number of new cases. The X-ray clinic was opened in March, 1913, and though treating only one-sixth or one-seventh of the cases, yet, by its more rapid cure of the disease, contributed further towards the diminution of the cases subsequently. After 1912 the figures for Ringworm of the Body follow closely those of Scalp Ringworm, no special administrative steps having been taken with regard to the former, which is usually easily recognised and readily treated.



It may be mentioned that the Scalp Ringworm curve is based on the gross cases reported and not on the figures after the diagnosis has been confirmed.

In the treatment of Ringworm of the Scalp by X-rays it is frequently necessary to treat the entire scalp, and this requires the exposure of five over-lapping areas. These exposures are from two-and-a-half to four minutes' duration in each case, according to the stength of the current used, and are administered after the hair has been cut at the first visit of the child to the Clinic. The cutting of the hair over the entire head is insisted upon, even when one area only is to be treated.

The parent is subsequently given a box of ointment and printed instructions as to its use, and also for the care of the head after the treatment. The child is re-examined after a lapse of three weeks, when it is usually found that the hair has completely fallen from the areas exposed to the Rays. The School Medical Officer is then notified, and in due course inspection at the Office follows, and the child, if fit, is passed for school. Re-inspection is made after a period of three months to note the re-growth of the hair, which is usually complete after a period of six months from the date of treatment. The new hair is usually stronger and thicker than the original growth.

The usual interval of time between the first attendance at the Clinic and the final passing of the child as being free from infection is from four to five weeks.

With the installation at the Clinic, which has now been in use for over nine years, well over one thousand cases have been treated, the total number of exposures being about three thousand.

The troubles experienced with X-ray tubes during the later years of the war, when the supply from America became insufficient and suitable glass for their manufacture was not to be had in England, have now been overcome, and tubes can be obtained of English manufacture which will stand the current for indefinite periods without alteration in vacuum. This is an important point, as a tube which varies makes uniform treatment impossible, and considerably increases the chances of unsuitable dosage.

Ringworm of the Body was reported in 521 cases, as compared with 549 and 441 in the two years previous. This disease is easily cured, and seldom presents administrative difficulties.

Scabies.

There were 898 cases of Scabies reported amongst school children during the year, these figures shewing a marked decline over those reported during the past three years which were as follows:—1,237 in 1920, 1,104 in 1919, 1,179 in 1918. The numbers, however, annually reported before the war were between 500 and 600.

Frequent visits by the nursing staff to the homes have been paid to urge the necessity of regular treatment, and frequent periodical examinations have been made by the medical staff with a view to certifying as to the fitness or otherwise of the children for school, and to advise the parents in the carrying out of the treatment, but the average absence from school still remains unnecessarily long.

In view of the absence of baths and other domestic facilities, owing to the shortage of house accommodation, it is almost impossible for many of the parents to carry out adequately the treatment at home, and much delay in securing a cure consequently results. It would, therefore, appear very desirable to provide one or more treatment centres, and to throw these centres open to persons of all ages. This procedure has been adopted with success in other areas.

The usual treatment by Sulphur Ointment is often persisted in after the Scabies infection has been cured, and an eruption known as Sulphur Dermatitis is frequently set up, very closely resembling the original eruption caused by the Scabies insect. This Dermatitis is often difficult to cure, and no doubt leads in many instances to difficulty in deciding when a cure has been effected, and in such cases delay in re-admission to school may arise.

External Eye Diseases.

At the routine inspections 638 cases of external eye diseases, or 1·5 per cent., were discovered, as compared with 2·0 per cent. for last year, two out of every three being cases of Blepharitis and one out of every four being Conjunctivitis.

The former is a condition often associated with poor nutrition and want of cleanliness, and was present almost entirely in the poorer districts. Conjunctivitis was also more prevalent in the poorer districts, but was often caused not so much by home conditions as by infection from other children, this occurring sometimes in epidemic form. A large proportion of the cases are treated at the Minor Ailments Clinics.

Defective Vision and Squint.

Amongst the children of 8 and 12 years of age, the only ones to have a systematical examination of the eyesight, there were discovered 6,220 cases of defective vision, or 23 per cent., as compared with 25·5 per cent. in 1920.

The great majority of the cases treated were dealt with under the Education Committee's scheme, as the Hospitals no longer provide treatment for school children, and very few of the parents can afford the fees of the specialist. Details of the Committee's arrangements were given in the last Annual Report. A considerable increase (approximately 50 per cent.) in the number of new cases treated has to be reported, 4,149 having been examined for spectacles under the Committee's scheme. Of these, 3,527, or 85 per cent., were treated at the consulting rooms of the approved doctors, and the remainder at the three Clinics where all the re-examinations, 1,565 in number, were carried out.

There were thus 5,714 cases examined, either as new or as re-examination cases, and in 5,280 cases new glasses were prescribed.

An analysis made of 3,000 eyes refracted by the Committee's Eye Doctors gave the following results:—

Hypermetropia	1,085	or 36 %
Hypermetropic astigmatism ...	981	or 32·7 %
Myopia	276	or 9·2 %
Myopic astigmatism	356	or 11·9 %
Mixed astigmatism	218	or 7·3 %
Emmetropia	61	or 2·0 %
Refraction impossible	23	or 0·8 %
	3,000	

These figures are similar to those worked out in 1913, and to figures provided by other Authorities in their Annual Reports.

A squint was recorded in 31·6 per cent. of the cases referred to the Eye Surgeons, nebulae (or scars on the cornea interfering with the sight) in 2·5 per cent., and disease or defect within the eye itself in 1 per cent. These were chiefly cases of cataract, choroiditis and optic atrophy, approximately half of these being congenital.

Amonst the children seen at the routine inspections, squint was recorded in 2·39 per cent., as compared with 2·44 per cent. in 1920; that is, squint is present in approximately one in every 41 children, whilst, as mentioned above, it is present in approximately one in every three cases of defective eyesight. In a large number of cases the squint develops before school life and remains untreated until after the first routine examination of the children at school. It is well known that the sight in a squinting eye usually deteriorates rapidly from want of use, and that it is a very difficult matter to bring back satisfactory vision to such an eye once the sight has been allowed to deteriorate. Consequently, it is a matter of great importance to obtain treatment for squint as soon as it is discovered, by obtaining glasses to remedy the ocular defect, which is in most cases the cause of the squint. It is not until the child is somewhat older that the proper practising of the defective eye can be undertaken. In many cases of squint, however, the sight in the squinting eye has so badly deteriorated by the time that treatment by the specialist is sought, that the chances of recovery of the sight are very poor unless the parents and child are prepared to co-operate in carrying out the special exercises advised. It is found, as a matter of experience, that this is practically never done except in the better neighbourhoods of the City, and even there by no means invariably. As a result, much expense is incurred with little real result. Similar remarks *re* practising defective eyes were made in the last Annual Report, but the remarks applied to amblyopic (or defective) eyes in general and not specially to squinting eyes. It is a matter for oculists to consider seriously whether, at the present time, it is wise to order glasses where there is a defective eye (whether or not associated with squint) in which the sight has seriously

deteriorated without at the same time the parents giving an undertaking that the children will carry out carefully and for the length of time advised all the necessary exercises and precautions.

Many parents and children apparently think that their obligations cease as soon as the glasses are provided, and that nothing further is necessary, as after the glasses have been worn for a short time they are disused, mislaid or broken, or in other cases are worn only in school, despite printed and verbal instructions given to children and parents. As has been mentioned in previous Reports, the responsibility must be shared by the parents and the teachers, as the Medical Officer can only visit the schools at long intervals. It is interesting to note that in the Girls' Department of one school, out of 49 girls who should have been wearing glasses seven only were wearing them, and of these four admitted to the doctor that they only put them on because he was in the school. On another occasion a surprise visit was paid to a department which had been recently inspected, and it was found that only one out of 39 children who had been provided with glasses was wearing them. It is not unknown for children when asked why they are not wearing their glasses to give as the reason that they did not know that the doctor was coming, But, generally speaking, the reason for the non-use of the glasses appears to arise from comments of the other children.

The figures for 1921 with regard to the non-wearing of glasses closely resemble those for 1920, in that approximately 36 per cent. of the children were not wearing their glasses when examined by the School Medical Officer. The figures vary with the different neighbourhoods, being worst in the poorer districts, and it has to be remembered the figures represent a better condition of affairs than is normally existent, as the children make a special effort to wear their glasses whilst the School Medical Officer is at the school.

At the root of the trouble is the ignorance or indifference of the parents, or the want of parental control. The whole matter received the attention of the Committee towards the end of the

year, and, acting on the suggestion of the Medical Officer, they decided that, as far as possible, the teachers should keep at the school the glasses of the children who do not regularly wear them. This should ensure the regular wearing of the glasses at school, and the prompt reporting of damage to the frames or lenses. The scheme was tentatively put into operation at one school, and the Head Teacher reported that a certain proportion of the children stated that their parents had said they must take their glasses home. Subsequent investigation proved that very few of those who took the glasses home ever wore them in school.

Another matter to which attention has to be drawn is the fact that practically no effort is made to get glasses repaired when broken, or replaced when lost, except under pressure from the office after a re-inspection of the children by the School Medical Officer.

During the year, notices were sent to the parents of 1,429 children urging upon them the necessity of regularly wearing the glasses, and in 2,804 instances with regard to the repairs of broken glasses or the replacement of lost or unsuitable glasses.

Tonsils and Adenoids.

Of the routine children examined, 4,044 (9·3 per cent.) were considered to be suffering from enlarged tonsils or adenoids, or both. Of these cases 815 (1·9 per cent.) were referred for treatment, as compared with 3·1 per cent. in 1920 and 2·9 per cent. in 1919, whilst 3,229, or 7·4 per cent., were kept under observation. It is not unusual to find more than one member of a family suffering from tonsils and adenoids, and, as both Sir Clifford Allbutt and Sir William Osler have observed, it is one of the affections in which the influence of heredity is most obviously seen, whilst Kyle holds that the cause of the tendency to adenoids is frequently found in the inherited family nose. The strumous diathesis is also considered to be an important pre-disposing factor in many cases, but these growths frequently occur in otherwise healthy families living in perfectly sanitary surroundings and

without any attributable cause. As mentioned in a previous Report, it is becoming increasingly rare to find children with the marked symptoms associated with neglected treatment of these defects. This beneficial result may be justly claimed as one of the obvious results of medical inspection.

The signs and symptoms of each case for which treatment is advised are entered on the medical record cards for future use at the Clinic, should the child eventually be sent there.

In 224 cases in which the advisability of operation was doubtful, the cases were sent to see the Committee's Throat Surgeon at the Clinic; in 94 of these cases the Surgeon advised operation. This method, by which the Surgeon's opinion can be obtained before arrangements are actually made for treatment, is a very useful one, and will be availed of in the future as far as the time of the Surgeon will permit.

So far as the treatment is concerned, the great majority of cases treated were operated on at the Tonsils and Adenoids Clinic at the North Dispensary, as the Hospitals now refuse to treat such cases, and the private doctors' fees for the operation are more than the majority of the parents of the elemenary school children can afford. During the year the Clinic was opened on 123 occasions, and 1,325 children were operated on, an average of 10·8 per occasion. The operations comprised removal of tonsils only in 742 cases, removal of adenoids only in 227 cases, and removal of both tonsils and adenoids in 356 cases; total 1,325.

Mr. Yorke, the Surgeon at the Clinic, reports that the selection of cases for operation is very carefully made. All the children brought for operation by their parents are first carefully examined and the parents interviewed with respect to symptoms and the home conditions. The report of the signs, symptoms, history, etc., made by the School Medical Officer is considered before the decision whether to operate or not is made. The Surgeon found it not desirable to operate in 394 cases. In addition, in

56 cases, whilst an operation was considered desirable, the condition of the children's health made it necessary to postpone the operation for some months.

These two groups of cases in which operation is not performed at the time have, along with the number of children failing to attend the Clinic when summoned, to be taken into consideration when arranging for the Clinic to be opened, and it has become necessary to summon 26 children to attend in order to secure the treatment of 12 children, the maximum the Clinic can accommodate. As in some instances this would lead to the turning away of a number of children, it has been the custom to select out of their turn five cases living not far away from the Clinic, and give these cases the opportunity of being treated earlier, provided there are vacant beds. This has been found to work very successfully. Without some such arrangement, the average number treated would have dropped to seven or eight per occasion instead of 10·8.

When operation is required the anæsthetic used is nitrous oxide gas, owing to it being practically free from risk. After operation the children are put to bed in a ward on the premises and examined frequently during the next few hours, so that if haemorrhage occurs it can be dealt with immediately. Hæmorrhage, which was considerable in 16 cases, occurred in 48 cases (3·6 per cent.), and it is confidently anticipated that this small proportion will be reduced in the future owing to a new method of arresting the bleeding which has recently been devised. All the hæmorrhage cases followed removal of the tonsils.

In 30 instances (2·4 per cent.) the children were kept at the Clinic for more than one night.

The after care of the children at home and the method of practising breathing exercises are described in printed instructions which are distributed to the parents.

Ear Disease.

Defective hearing was reported in 337 of the Routine cases (·77 per cent.), otitis media (discharging ears) in 640 cases (1·5 per cent.) and other ear diseases in 290 cases (·66 per cent.).

The percentages vary from year to year within narrow limits, but on the whole there has of recent years been a slight decline in the cases of otitis media. The difficulty in securing satisfactory and continuous treatment of this defect induced the Committee to open in May an Aural Clinic at the North Dispensary, the surgeon appointed being Mr. Yorke, who is also the surgeon for the Tonsils and Adenoid Clinic, which is held in the same building. In addition to cases of ear discharge, cases of deafness are also dealt with.

The Clinic was open on 24 occasions, 320 new cases being seen and 109 re-examined. Mr. Yorke reports as follows:—

> "Of the 320 new cases, nearly 70 per cent. had active middle ear suppuration in one or both ears. There was a wide range in the extent of the disease among these cases. In the majority simple perforations of the drum existed, and a cessation of discharge is to be expected with regular cleansing and antiseptic treatment. It is for these mild cases that zinc ionisation is specially recommended, and it is hoped that it will be found feasible to adopt this method at the Clinic in the near future. There were 91 children, however, in whom the middle ear suppuration was accompanied by disease of bone, and granulation tissue or polypi were also discovered. Most of these latter cases are likely to continue to discharge indefinitely, although many have been benefited by the removal of granulations and polypi.
>
> "The radical mastoid operation has certain drawbacks in children, but it was found necessary in 7 cases which were sent to hospital for the purpose. These children were complaining of pain, and suffered from either extensive bone disease, cholesteatomata, or stenosis of the meatal canal.

"Whenever possible, cases of middle ear suppuration requiring conservative treatment only were sent to the Minor Ailments Clinics, and the latter were notified as to the precise remedies required.

"109 children attended the Aural Clinic on more than one occasion, and it was satisfactory to find that many who had been attending the Minor Ailments Clinics regularly shewed definite improvement, and in a few the discharge had quite ceased.

"It cannot be too strongly emphasised that middle ear suppuration is always to be considered as a condition of gravity. The experience gained at the Aural Clinic strongly supports the well-recognised fact that middle ear suppuration in its incipient stage is most responsive to treatment, but if neglected at this critical time it is only too apt to drift into a despairingly chronic state, impairing the health and lowering the efficiency of the patient.

"The remaining cases treated at the Aural Clinic are shewn in the table, and sufficiently explained thereby."

Total cases examined			320
Suppurative otitis media—			
Active—one ear	167	216	267
both ears	49		
Quiescent		51	
Granulations			83
Wax, debris, &c., removed			25
Foreign body removed			5
Polypus removed			8
Catarrhal middle ear deafness (including Eustachian Catarrh)			23
Internal ear deafness			2
Skin disease of external ear			3

Advice given:—

Referred for treatment to Minor Ailments Clinics...		153
,,	,, Hospital	7
,,	,, Parent	17
,,	removal of Tonsils or Adenoids ...	8
,,	breathing exercises	10
,,	School for the Deaf	5

The co-operation of the Aural Clinic with the Minor Ailments Clinics has proved of great value to the School Medical Officers working at these latter Clinics, where there are no facilities for the special examination of ears, even did time allow of such examinations. The number of ear cases attending these Clinics is sufficiently large as almost to keep the Aural Clinic regularly supplied, and the cases for the Aural Clinic are selected mainly from the Minor Ailments Clinics since the continuous and satisfactory carrying out of the treatment recommended is thereby ensured.

Tuberculosis.

During the year the School Medical Officers examined 274 cases of Tuberculosis or doubtful Tuberculosis, 112 being pulmonary cases, 81 glandular, and 81 other forms of the disease.

Of these numbers there were discovered at the routine examinations of the children only 6 definite cases and 6 doubtful cases of pulmonary Tuberculosis, these being the final figures after the children had been examined by the Tuberculosis Officers, or after the re-examination by the School Medical Officers. The routine examinations also brought to light 27 cases of tuberculous glands, and 12 cases of other forms of Tuberculosis, a total of 51 actual or suspected cases, or 0·11 per cent. of the children examined, as against 0·4 per cent. in 1920.

Amongst the special cases examined at the schools or at the Inspection Clinics, 65 cases of Phthisis, 35 cases of suspected Phthisis, 54 of glandular Tuberculosis, and 69 other forms of Tuberculosis were discovered.

Most of the cases of Tuberculosis or doubtful Tuberculosis met with are referred to the Tuberculosis Department for further examination and treatment if necessary, detailed reports concerning each case being subsequently returned. By arrangement the Tuberculosis Department also supplies at frequent intervals particulars with regard to all school children examined by the Tuberculosis Officers, and the School Medical Department is therefore in a better position to take any steps that may be necessary, *e.g.*, with regard to the exclusion or re-admission of such children. Thus, during the year, the Tuberculosis Department supplied information with regard to 1,301 children, of whom 146 had been referred to that Department for diagnosis or treatment, as compared with 182 in 1920 and 132 in 1919.

It will be seen from Table III in Appendix A that at the end of the year the total numbers of cases of pulmonary Tuberculosis under observation were 491, all of which had been excluded from school; the numbers of cases of non-pulmonary Tuberculosis known to the Department were 374, of which 70, whose physical condition enabled them to do so, were attending Public Elementary Schools, and 111 were attending Schools for Physically Defective Children provided by the Education Authority.

Of the 491 cases of pulmonary Tuberculosis 105 were in Institutions, chiefly at Fazakerley or Parkhill Sanatorium, and at both of these Sanatoria classes have been arranged by the Hospitals Committee for the teaching of those children whose physical condition permits of this being done. Dr. Rundle states that 60 to 70 per cent. of the children at Fazakerley Sanatorium comprise cases of Phthisis without any sputum or with sputum in which no tubercle bacilli have been found after repeated examinations. It is from these cases in the main that the children taught at the classes have been chosen: these averaged 35 throughout the year. The duration of the sessions was $1\frac{3}{4}$ hours each morning and afternoon, whilst the older boys have, in addition, one or two hours' mechanical work under a skilled craftsman. Dr. Rundle remarks on the marked mental improvement of the children as the result of the teaching, and emphasises the therapeutic value of regular school

hours. He further states that there is probably no disease in which the physical condition reacts to mental stimulus so markedly as in the case of Phthisis.

The school at Parkhill Sanatorium was opened in June, 1920, and during 1921 had an average attendance of 52, the ages of the children being from 5 to 15 years. As many of the children had not been at school for years, there was a marked variation in the educational attainments of those admitted to the school, making grading difficult. Dr. Macintyre, the Medical Superintendent, states that the children exhibited great keenness, and many made rapid progress, as they put more zest into their studies than would be usually found at the ordinary schools, the work proving a welcome relief to the restrictions imposed upon them owing to the necessities of their treatment. As at Fazakerley, it was noted that the properly guided mental activities had a distinct tonic effect on the system as a whole, and often led to a very noticeable improvement in the physical condition. Miss James, the Supervisor of the Special Schools under the Education Committee, occasionally visits the school, and has rendered valuable assistance in advising and in supervising certain branches of the work.

With regard to the cases of surgical Tuberculosis, of which 374 were known to the Department at the end of the year, 111 were attending Physically Defective Schools under the Education Committee, and 59 were reported as being in-patients in various Institutions, including the Liverpool Hospital for Children at Leasowe. This Hospital practically confines its attention to the treatment of non-pulmonary Tuberculosis, but a special feature of the Hospital is the arrangements for education, and it is an open-air residential Hospital School. Dr. Martin, the Resident Medical Officer, in his Medical Report on the work of the Hospital, points out that prior to admission to the Hospital, many of the children had been away from school for a considerable time and had been spoilt at home, with unfortunate results to their temperament and habits which the prolonged enforced recumbency and immobilisation of the diseased areas would tend to aggravate, were it not for the lessons and discipline of the school routine, which direct into proper and

healthy channels the natural activities of the children. As in the case of the classes for the pulmonary cases at Fazakerley or Parkhill, it is pointed out that the school tuition of $3\frac{1}{2}$ hours or so daily, by providing an occupation suitable to the mental needs of the children, is a powerful aid to cure, and the success resultant upon the combination of education and medical care is a convincing argument in favour of the treatment of these cases in such institutions, whilst the larger the institutions the more efficient will be the treatment. Most of the children over 5 years of age receive education, but from time to time exacerbations of the disease may cause the children to be temporarily withdrawn from the class.

The following Table gives the average duration of stay in Hospital of the various types of the disease :—

Group.	Type of Case.	Average stay in days.	Range of stay in days.
I.	Bones or Joints	574	228—1276
II.	Abdominal	252	112—396
III.	Other Organs	246	—
IV.	Peripheral Glands	183	98—285

Many of the cases in Group I are discharged in a fit condition to be admitted forthwith to one of the Public Elementary Schools, even though the children are wearing on discharge a light protective splint.

In Group II the prospect of re-admission to an Elementary School depends largely upon the types of home to which the children return, those returning to poor homes often having poor health and being children for whom essentially open air residential schools are required.

The majority of cases in Groups III and IV are able to resume attendance at school on discharge from Hospital.

Of the cases discharged from the Hospital 83·5 per cent. are discharged with the disease in a quiescent state, which is very satisfactory, and to a considerable extent this is the result of the combination of school with medical treatment.

A small proportion of the cases relapse after discharge, but this could be obviated by the provision of continuation schools of the open air residential type.

Dental Defects.

At the routine examinations of the children the School Medical Officers continue to examine the condition of the teeth, and where necessary parents are advised to secure treatment privately or at the Dental Hospital or Royal Children's Hospital, unless the children are of Clinic age and attend schools served by these Clinics. As the Clinics extend their operations fewer children will be referred by the School Medical Officers. During the year there were 3,296 first notices sent to parents as compared with 4,896 in 1920.

An additional Clinic was opened in May at Netherfield Road, otherwise the arrangements were unchanged.

After careful deliberation the Committee have, however, decided to extend the Clinic arrangements at the Dental Hospital on quite new lines. The Dental Hospital has for many years been the teaching school for the Dental Department of the University, and during 1921 the University Authorities have provided an admirably equipped building adjoining the Dental Hospital for teaching purposes, thus setting free certain well lighted rooms in the Hospital which, it was suggested, could be fitted up as a School Dental Clinic.

It was recognised that under the Education Act, 1918, the Education Committee would be required, sooner or later, to make provision for the dental treatment of all school children in the City, and should the Authority appoint their own dentists to carry out their requirements, the Dental School would be handicapped in their

training facilities by having a large and important section of their work almost entirely removed. And further, the dentists qualifying from this University would not be able to obtain adequate experience in the dentistry of children, and this, no doubt, would prejudice Liverpool candidates from obtaining posts as School Dentists in the future.

The Dental Department of the University therefore suggested to the Education Committee that some form of co-operation between the University and Local Authority in the matter would be of mutual benefit. After several conferences between representatives of the University, Dental Hospital, and Education Committee, it was decided that final year students should be required to work for a period of, say, three months in the School Clinic under the supervision of the School Dentists and the Dental teaching staff. There would thus be some dozen or more students simultaneously working at the Clinic, or the equivalent of some four whole-time dentists, and the extra cost to the Education Committee would be little more than the initial outlay on furniture and equipment.

The Education Committee, subject to the Board's sanction, agreed to a modified scheme whereby four students would be constantly engaged at the Clinic; this arrangement would, without difficulty, be extended so as to allow of 12 students working simultaneously. The scheme, when fully developed, would be sufficiently comprehensive to deal with approximately one-third of the school population of the City.

The proposal forms an entirely new departure in dental arrangements in this country, and, it is believed, in the world, and is a scheme which should prove of great benefit both to the Education Committee and to the University.

It may be pointed out that it is only final year (*i.e.*, fourth year) students who would assist at the Clinic, and that such students have already had very considerable experience at the Hospital in connection with the various forms of dental work. It was not suggested that orthodontic work should be undertaken under this scheme, but

that the scope of the work should be practically confined, as at present, to fillings and extractions. On the grounds of economy another Clinic would be temporarily closed to give effect to this scheme, and to concentrate the work at the Dental Hospital.

The following summary shews the increasing amount of work carried out in connection with the dental scheme: —

	1919.	1920.	1921.
Number of children examined in School	13,481	17,964	21,556
Number of children requiring treatment	10,539 (78·2%)	14,175 78·9%)	17,750 (82·3%)
Number of cases accepting treatment	5,328	7,522	7,580
Number of cases treated	4,515	5,218	5,859
Number of Schools visited	53	55	50

The proportion of cases which were treated at the Clinics after treatment had been accepted and the small fee paid varied considerably. In 1919 this was 85 per cent., in 1920 it fell to 70·6 per cent., whilst in 1921 it was 77 per cent.

Under existing arrangements the present Clinics are only able to cope with certain age groups at some 50 schools, or about one-seventh of the school population. Difficulty in securing suitable premises, as well as financial considerations, have stood in the way of extensions of the present arrangements, but it would be possible to extend somewhat the operations of two of the Clinics in addition to the Dental Hospital scheme previously referred to.

Table IV D in Appendix A gives in detail the statistical matter required by the Board, separating the work done at each of the Clinics. In most of the extraction cases nitrous oxide gas is given, and one of the School Medical Officers usually attends to administer the anæsthetic.

The inspections of the children's teeth at the schools continue to be carried out by the Nurses who assist at the Clinics, and the School Dentists, from their experience of the cases attending the

Clinics, all speak highly of the satisfactory manner in which these inspections have been carried out. When a school is first inspected the children are examined at the ages of 6, 7 and 8, whilst subsequently one age group is added each year.

Most of the dentists recommend that the inspections should be carried out at intervals of not more than six months, as teeth often become unsaveable when a year elapses between the inspections.

One of the dentists reports a marked improvement in the hygiene of the children's mouths since 1914, when the Committee first opened these School Clinics, and also mentions that at his Clinic nearly 60 per cent. of those attending had received previous treatment, many as long as four years previously, no treatment having been necessary in the meantime, and further, that such cases required, as a rule, only minor operations.

Another of the dentists suggests the advisability of school talks on the care of the teeth, given during school hours by the dentists, as a means of educating the children in dental hygiene.

Some of the dentists draw attention to the disorganisation of the work caused if casual cases over the Clinic age attend for treatment. Nearly all such cases have numbers of septic permanent teeth which may require as long as three-quarters of an hour's treatment or even longer, each case thus keeping from Clinic treatment several children of Clinic age.

The children as a whole prove excellent patients, and troublesome ones are quite exceptionally met with.

One of the difficulties in securing treatment is due to want of knowledge on the part of many parents in various districts, as may be instanced by the following points noted by one of the dentists:—

(1) The first permanent teeth, or the 6-year old molars, are often regarded as temporary teeth on the grounds that no teeth have fallen out to make room for these permanent teeth.

(2) Any treatment of temporary teeth is regarded by many parents as wholly unnecessary.

(3) Parents usually regard extractions as the only treatment for all dental disease.

To overcome these views, time and patience and short talks to the parents by the dentists are necessary.

The proportion of permanent teeth filled to those extracted is slightly higher than last year, and will, no doubt, improve still further as additional age groups are added.

Exclusions from Schools.

The following Table shews the number of children excluded from school by the School Medical Officers during the course of their school inspections, or at the various inspection or treatment Clinics. The numbers excluded were very similar to those of the previous year.

Eye diseases	431
Scabies	384
Ringworm of body	274
Ringworm of scalp	250
Other Skin conditions	278
Infectious diseases	242
Pediculosis	199
Chest conditions (non-tubercular) ...	47
Tuberculosis (all forms)	27
Otorrhoea	21
Miscellaneous	237
Total	2,390

Infectious Diseases.

All the enquiries into the prevalence of infectious disease continue to be undertaken by the Public Health Department, the procedure with regard to notification and exclusion of cases also being unchanged.

During the first half of 1921 the schools were comparatively free from infectious disease, and only nine Infants' Departments required to be closed for this reason, mostly on account of Mumps. An outbreak of Diphtheria occurred in the Infants' Department of Upper Park Street Council School, where 16 cases occurred, of which six were in one class; in this class one child was found to be ill with diphtheritic membrane on the tonsil and was excluded, and the outbreak then rapidly subsided. A large number of children were swabbed, but no carriers of Diphtheria were found. The use of a common drinking cup in the playground was discontinued. Another measure which would probably tend to restrict the spread of infectious disease would be for every child to be required to provide his or her own pen, pencil and slate pencil, instead of the school providing a supply of these common to all the children. Glandular Fever, a disease which is frequently mistaken for Mumps, was prevalent in a number of schools, and two Departments of Aigburth C. E. School were closed in the spring on account of this disease. Three schools in Everton were affected with Influenza in April and May, but the outbreak was not sufficiently serious to require the closing of these schools.

During September, Scarlet Fever became prevalent in two schools in Kirkdale and Walton. By inspecting the children in the Departments affected, and excluding all children who presented symptoms pointing to a mild attack of this disease, the outbreaks were controlled without having resort to closure.

During the Autumn Term, Measles became increasingly prevalent. Eight Infants' Departments were closed during October and November, and during December 60 Infants' Departments were closed up till the holidays, 43 of these being closed from December 13th on account of the prevalence of Measles. The numbers of cases reported in the City, which had been steadily increasing, reached the maximum in this week, when a total of 612 cases were reported. Thereafter the numbers fell rapidly, 436, 292 and 209 being reported in the three succeeding weeks. The decline in deaths occurred

slightly later, the number of deaths reaching a maximum of 40 deaths in the week ending December 24th, after which date the weekly number of deaths also rapidly diminished.

The number of school cases reported during the year were: Measles 4,414. Whooping Cough 1,808, and Scarlet Fever 1,716, as compared with Measles 11,448, Whooping Cough 2,804, and Scarlet Fever 1,905, in 1920.

In the Corporation Act of 1921, which comes into force on April 1st, 1922, certain new powers with regard to infectious disease were obtained, and are quoted in full:—

SECTION 443.

(1) Any parent or guardian having personal charge of a child in attendance at school who is aware of or has reason to suspect the occurrence of any infectious disease in any member of the family and who fails forthwith to notify such occurrence to the head teacher of the school shall be liable to a penalty not exceeding twenty shillings.

(2) If any person not less than sixteen years of age while suffering from any infectious disease or being in charge of any person under sixteen years of age so suffering wilfully exposes himself or the person in his charge in such a manner as to conduce to the spread of the disease in any street public place shop inn or any public conveyance or being in charge of any person so suffering wilfully exposes such sufferer he shall be liable to a penalty not exceeding five pounds.

(3) In this Section the expression "infectious disease" includes measles German measles whooping-cough and chicken-pox and the expression "school" includes a Sunday school or other school in which children are assembled for religious instruction.

SECTION 458.

(1) If the Corporation or a Committee of the Council acting on the advice of the Medical Officer with the view of preventing

the spread of infectious disease in the City require the closing of any Sunday school or any department thereof or the exclusion of certain children therefrom for a specified time or the exclusion of children from places of public entertainment or assembly for a specified time such requirement shall be at once complied with.

(2) Any person responsible for the conduct or management of any Sunday school or place of public entertainment or assembly wilfully failing to comply with any such requirement shall for every such failure be liable to a penalty not exceeding five pounds.

(3) In this Section the expression "Sunday school" includes any school in which children are assembled for religious instruction.

Section 459.

(1) No person being the parent or having the care or charge of a child who is or has been attending any school or Sunday school or any part thereof which has been closed by order of the Corporation or a Committee of the Council with a view of preventing the spread of infectious disease or of a child who with the same view has been prohibited from attending school or Sunday school by any such order or by the Medical Officer or School Medical Officer shall permit such child to attend any Sunday school treat or any place of public entertainment or assembly in the City without having procured from the Medical Officer a certificate (which shall be granted free of charge upon application) that in his opinion such child may attend the same without undue risk of communicating disease to others.

(2) Any person who shall offend against this Section shall be liable to a penalty not exceeding forty shillings.

(3) In this Section the expression "school" includes a Sunday school or other school in which children are assembled for religious instruction.

Notifications to Parents *re* Defects.

The following table shews the number of printed notices to parents relating to various defects discovered during the course of the medical inspection of the scholars, compared with the number sent out in 1920.

Table D.

Defect.	First Notices.		Second Notices.		Third and subsequent Notices.		Totals.	
	1920	1921	1920	1921	1920	1921	1920	1921
Defective Vision :—								
A.—Untreated Cases	4,925	4,843	537	983	84	116	5,546	5,942
B.—Previously treated cases :								
(i) Glasses lost, broken, or unsuitable	2,529	2,804	13	27	—	2	2,542	2,833
(ii) Glasses not being worn	1,169	1,429	124	157	21	29	1,314	1,615
Eye Conditions	296	237	24	23	8	4	328	264
Defective Hearing	92	64	6	7	1	2	99	73
Otorrhœa	352	220	27	34	11	7	390	261
Other Ear Conditions	214	227	32	43	16	13	262	283
Enlarged Tonsils and Adenoids	2,936	1,907	217	227	73	42	3,226	2,176
Mouth Breathing	2,127	2,152	285	261	75	78	2,487	2,491
Defective Teeth :—								
A.—Referred by School Medical Officers	4,986	3,296	1,647	1,286	911	732	7,544	5,314
B.—Referred by School Dentists	14,175	17,750	—	—	—	—	14,175	17,750
Anæmia and Malnutrition	245	187	25	9	4	—	274	196
Skin Conditions	182	185	3	3	5	2	190	190
Chest	81	141	3	2	—	—	84	143
Deformities	73	67	3	7	1	1	77	75
Other Defects	380	444	40	57	17	10	437	511
Totals	34,762	35,953	2,986	3,126	1,227	1,038	38,975	40,117

Following-up.

The methods for following up defects at the homes which have been in force in previous years have been continued, namely:—

(1) The School Attendance Officers visit the parents of children with defects where the Committee have provided treatment for which a charge is made, viz.:—Defective Vision, Tonsils and Adenoids, Dental Defects referred by the School Dentists, and Ringworm cases referred for X-ray treatment. There were referred during the year 30,163 such cases for following up, an increase of 9,000, mainly cases of Defective Vision and Dental Caries. Children who fail to attend at the various Clinics are also followed up by these Officers.

(2) The School Nurses follow up, with a few exceptions, the other cases and all the verminous and generally neglected children. The numbers referred in 1921 were 18,424, practically the same figures as in 1920. As a considerable proportion of the medical cases necessitate urging the parents to see that children wear their glasses regularly and constantly, or carry out prescribed breathing exercises, a certain amount of visiting might be obviated by arranging for the glasses to be kept in the schools, and by the special breathing exercises being carried out during drill time and supervised by the teachers at the schools.

(3) In the case of one school, a Care Committee makes itself responsible for the following up.

(4) The Child Welfare Association has continued to render valuable help in securing convalescent treatment, surgical treatment or appliances, special tonics or extra nourishment for children requiring such treatment. Some 723 cases were referred during the year, 97 more than in the previous year.

(5) The Tuberculosis Department has dealt with 146 cases referred for diagnosis and treatment.

(6) Cases living outside of Liverpool, but attending Liverpool schools, are referred to the School Medical Officer of the Authority responsible.

Table E gives the results of the following up as reported by the visitors undertaking the work.

Table E.

Following-up Agencies.	Carried over from previous year.	Referred during 1921	Treated.	Treatment refused or evaded.	Left School, etc.	Total reported upon.	Cases still under observation at end of year.
SCHOOL ATTENDANCE STAFF—							
Vision	1,596	9,008	5,967 (56·27%)	1,515 (14·29%)	516 (4·87%)	7,998	2,606
Dental: School Dentist's Cases	5,312	17,750	8,914 (38·65%)	7,131 (30·92%)	233 (1·01%)	16,278	6,784
Tonsils and Adenoids	678	3,024	1,826 (49·41%)	1,283 (34·66%)	150 (4·05%)	3,262	440
Ringworm of Scalp	32	381	172 (41·65%)	223 (54·00%)	2 (0·48%)	397	16
FEMALE SANITARY STAFF—							
Medical Defects	2,649	8,129	4,340 (40·27%)	1,978 (18·35%)	517 (4·80%)	6,835	3,943
General Neglect	2,442	7,364	7,557 (77·07%)	—	27 (0·28%)	7,584	2,222
Verminous	894	2,931	2,673 (69·88%)	—	10 (0·26%)	2,683	1,142
OTHER AGENCIES—							
Medical Defects	319	1,569	688 (36·44%)	804 (42·58%)	11 (0·58%)	1,503	385

Supervision of Absentees.

As mentioned in previous Reports, children absent from school on medical grounds are examined on Saturday mornings at various Inspection Clinics, with the object of noting progress and giving certificates of re-admission when the children are fit to return. In the case of Phthisis, Ringworm of the scalp and Scabies, the Committee require the certificate of the School Medical Officer before children are re-admitted to school.

The following Table shews the results of the examination of absentees during the year. It will be noted that there has been a marked increase in the amount of this work during the past two years, the chief increase being in the Scabies cases, the number of examinations of these cases having increased from 333 in 1920 to 1,903 in 1921.

Table F.

Defect.	Children re-admitted to school.	*No. of examinations of children not re-admitted to school.	Total Examinations.
Ringworm of Scalp	732	1,237	1,969
Scabies	967	936	1,903
Other Skin conditions	123	94	217
Eye Diseases	88	150	238
Deafness	3	14	17
Ear Diseases	19	28	47
Phthisis and supposed Phthisis	57	210	267
Other Chest conditions	179	210	389
Tuberculosis other than Phthisis	190	196	386
Injuries and Deformities	7	9	16
Heart	36	97	133
Rheumatism	24	36	60
Anæmia and Debility	156	219	375
Nervous	65	171	236
Other Defects	74	120	194
Tonsils and Adenoids	8	12	20
Other Crippling Defects	28	77	105
No defect found	21	—	21
Totals for 1921	2,777	3,816	6,593
Totals for 1920	1,771	3,361	5,132
Do. do. 1919	1,404	3,075	4,479

* These figures indicate several examinations of certain of the children, approximately two to each.

Table G.—Shewing Causes of Absence from Sc

Reason of Absence.	Number of attendances lost.	Percentage of total absences.	Number of children involved.	Average of attendances lost per child absent.	Percentages o Department.	
					Boys.	Girls.
Infectious Diseases	20,754	20·4	799	26	1·73	2·00
Respiratory Diseases (including Colds, Catarrh, etc.)	16,364	16·1	2,098	8	1·27	1·43
Skin Diseases	14,071	13·9	570	25	1·56	1·30
Eye Diseases	4,257	4·2	286	15	0·28	0·50
Ear Diseases	774	0·8	190	4	0·04	0·13
Teeth Defects	940	0·9	402	2	0·11	0·13
Throat Diseases	3,421	3·4	402	8	0·37	0·41
Digestive System Diseases	2,753	2·7	689	4	0·34	0·36
Heart Diseases	646	0·6	23	28	0·12	0·10
General (including Anaemia, Debility, Rheumatism and Chorea)	4,800	4·7	186	26	0·41	0·91
Enlarged Glands	1,434	1·4	146	9	0·10	0·09
Abscess, etc.	1,833	1·8	176	10	0·24	0·15
Other Defects	1,687	1·6	607	3	0·22	0·20
Injuries	2,066	2·0	222	9	0·34	0·18
Operations	797	0·8	33	24	0·11	0·03
Defect not specified	8,124	8·0	2,499	3	0·58	0·71
Total	84,721	83·3	—	—	7·82	8·63
Illness at home	4,304	4·2	795	6	0·28	1·06
Domestic Duties, etc.	2,336	2·3	1,250	2	0·33	0·44
Went to Entertainment	1,035	1·0	714	1	0·11	0·19
On Holiday	967	1·0	117	9	0·13	0·06
Bad Footwear	834	0·8	276	3	0·08	0·11
Bad Weather	248	0·2	178	1	0·01	0·03
Too Late	3,729	3·7	2,715	1	0·33	0·49
Truanting	366	0·4	69	5	0·12	0·00
Neglect	1,891	1·9	552	3	0·08	0·19
Others	1,228	1·2	278	5	0·22	0·12
Total	16,938	16·7	—	—	1·69	2·69
Grand Total	101,659	—	—	—	9·51	11·32

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f attendances lost in terms of possible attendances.

Infants.	Poor and Fair Neighbourhoods.	Better Neighbourhoods.	Total.
4·34	0·85	4·21	2·42
3·23	1·33	2·56	1·91
2·09	2·05	1·18	1·64
0·46	0·78	0·18	0·50
0·13	0·06	0·12	0·09
0·08	0·11	0·10	0·11
0·29	0·32	0·49	0·40
0·19	0·30	0·35	0·32
0·05	0·06	0·09	0·08
0·46	0·39	0·76	0·50
0·26	0·15	0·18	0·17
0·22	0·22	0·21	0·21
0·10	0·21	0·19	0·20
0·24	0·32	0·15	0·24
0·14	0·07	0·12	0·09
1·48	1·23	0·62	0·95
13·76	8·45	11·51	9·89
0·18	0·59	0·41	0·50
0·06	0·37	0·16	0·28
0·10	0·08	0·16	0·12
0·15	0·05	0·19	0·11
0·07	0·11	0·08	0·10
0·06	0·01	0·05	0·03
0·64	0·68	0·15	0·43
0·00	0·07	0·02	0·04
0·37	0·29	0·14	0·22
0·08	0·11	0·18	0·15
1·71	2·36	1·54	1·98
15·47	10·81	13·05	11·87

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Causes of Absence from School.

A special enquiry was instituted with the co-operation of the Head Teachers at the beginning of the year into the proportional numbers of children absent from school and the causes and duration of their absences. The period chosen was the first quarter of the year, *i.e.*, from the Christmas holidays till the Easter holidays, this being the quarter when the attendance at school is usually the poorest. Four schools in fairly good neighbourhoods were selected for comparison with four schools and one department from poorer neighbourhoods, the numbers compared thus being equalised. The parents in the former case were mostly of the clerks, shopkeepers and tradesmen type, whilst in the case of the latter they were chiefly labourers and artisans. The schools were all large ones, the total number of children on the combined rolls being 8,062.

During the period in question the average attendance for all the elementary schools in the City was 88·6 per cent., whilst the attendance for the schools investigated was 88·13 per cent., made up by 86·95 per cent. at the schools in the better neighbourhoods, and 89·19 per cent. in the poorer districts. The smaller proportion of attendances in the better neighbourhoods was occasioned, as shewn in Table G, by the local prevalence of infectious disease in three of the schools in question.

Table G gives detailed information as to the causes of absence and shews that medical reasons accounted for five-sixths of the total absences, the chief medical defects being respiratory, infectious and skin diseases.

Table H gives further details regarding the infectious and skin diseases, and it will be noted that amongst the infectious cases measles was the most frequent cause of absence, whilst the skin diseases consisted almost entirely of sores (chiefly Impetigo), Scabies and Ringworm, in that order. It must be noted that in this Table the average attendances lost per case refer to the attendances lost during the eleven weeks of the enquiry only, and not to the total attendances altogether lost by the children involved.

The largest number of children were absent on account of respiratory diseases, including coughs and colds, the average period of absence from school being about four days.

Infectious diseases accounted for the next largest proportion of absentees, the average period of absence in this case being about two weeks.

Skin diseases appear high upon the list, the commonest skin complaint amongst school children being Impetigo, a disease frequently encountered in the poorer districts, and closely associated with dirt. This contagious disease is one which would rapidly diminish with further improvements to personal cleanliness.

The same remarks are applicable to the absences attributable to eye diseases, mainly cases of Conjunctivitis and Blepharitis, diseases notably associated with neglect and malnutrition, and which unfortunately lead in a number of cases to permanent impairment of vision and loss of education.

These points are brought out in the Table of comparison between the poorer and better class schools (Table G), where it will be noticed that the figures in the majority of diseases are extraordinarily parallel with the exception of eye diseases (four times more common in the poorer schools) and skin diseases (double that in the better districts). On the other hand it will be noticed, paradoxical though it may seem, that in the cases of children absent from respiratory and general causes, this in the better schools is double that in the poorer, the explanation probably being that better care is taken of the children with incipient ailments in the better class neighbourhoods.

Of the non-medical reasons there is no outstanding difference, the main point noticeable is that the number of children absent through being "too late" is four times more common in the poorer schools.

Table H.—Absences due to Infectious Diseases and Skin Diseases.

	Disease.	Number of cases.			Attendances lost.						Percentage of attendances lost in terms of possible attendances.
					Number.			Average per case.			
		Poor Schools.	Good Schools.	Total.	Poor Schools.	Good Schools.	Total.	Poor Schools.	Good Schools.	Total.	
Infectious Diseases.	Scarlet Fever	20	45	65	744	1,809	2,553	37	40	39	0·30
	Diphtheria and Croup	10	45	55	163	1,496	1,659	16	33	30	0·19
	Measles	3	135	138	125	3,972	4,097	42	29	29	0·48
	Whooping Cough	29	41	70	604	2,070	2,674	21	50	38	0·31
	Chicken-pox	22	37	59	454	1,090	1,544	20	29	26	0·19
	Mumps	28	119	147	450	2,442	2,892	16	20	20	0·34
	Typhoid Fever	—	1	1	—	105	105	—	105	105	0·01
	Influenza	44	32	76	450	498	948	10	15	12	0·11
	Phthisis and ? Phthisis	6	2	8	354	200	554	60	100	69	0·06
	Other Forms of T.B.	2	2	4	82	112	194	41	56	48	0·02
	Contacts	41	135	176	454	3,080	3,534	11	21	20	0·41
	Total (Infectious Diseases)	205	594	799	3,880	16,874	20,754	19	28	26	2·43
Skin Diseases.	Sores	249	99	348	4,123	1,502	5,625	16	16	16	0·66
	Scabies	45	17	62	2,672	1,025	3,697	59	60	60	0·43
	Ringworm	30	19	49	1,655	1,311	2,966	55	69	60	0·34
	Eczema	24	4	28	706	156	862	29	39	31	0·10
	Verminous	6	2	8	42	40	82	7	20	10	0·01
	Others	21	54	75	164	675	839	8	12	11	0·10
	Total (Skin Diseases)	375	195	570	9,362	4,709	14,071	25	24	25	1·64

HIGHER SCHOOLS.

The medical inspection of the nine provided Secondary Schools, four non-provided Secondary Schools and three Day Technical Schools was carried out on the lines required by the Board of Education.

There were thus inspected in a routine manner 2,668 pupils between the ages of 8 and 17, and 299 pupils as special cases, whilst 2,991 children were re-inspected with regard to various defects which had been previously noted.

The main defects discovered, as shewn in Appendix B, Table II, were Defective Vision (22 per cent.), enlarged Tonsils or Adenoids (9 per cent.), Dental defects (18 per cent.), various deformities, mostly of a mild degree (10 per cent.). The figures cannot be satisfactorily compared with those of the elementary children as a higher standard of health is required, largely because the parents are more willing or able to secure the remedying of the defects, and partly because the greater strain of school life in the Higher Schools makes certain defects relatively more important. Thus, the much greater use of the eyes for near work makes it more important to secure treatment for a considerably milder defect of sight than would be necessary in the case of an elementary school child. The recognition of various deformities, including scoliosis and flat foot, are important in connection with the physical exercises, games, &c., undertaken at the schools.

It is satisfactory to note that very few cases requiring treatment for want of cleanliness were reported. These cases were usually remedied at once when the defect was pointed out.

The following-up of the defects was, by arrangement, left to the Head Teachers, who are usually in close touch with the parents. As a matter of fact, the parents as a whole shewed themselves, as might be expected, usually eager to secure the treatment suggested, with the result that the proportion of cases treated was very satisfactory.

The Clinics provided for the elementary children were made available for Higher School children whose parents could not afford private treatment, and in the case of Defective Vision arrangements were made with certain oculists to see pupils at a reduced fee if the parents could not afford the full fee.

All the Tables relating to Higher Schools are shewn in Appendix B, pages 72 to 81.

BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

Six Special Schools are conducted for defective children—the same number as last year. Four are double centres for both physically and mentally defective children, one a centre for mentally defective children only, and one a residential country school for physically defectives. The total accommodation provided, the number on rolls and the average attendance are as follows:—

	Accommodation.	Number on Rolls	Average attendance.
Mentally defectives	483	505	425
Physically defectives ...	383	457	359
Residential school	50	50	49

The arrangements for ascertaining what children are mentally defective within the meaning of the Elementary Education (Defective and Epileptic Children) Acts are those approved by the Board of Education, and similar arrangements exist, so far as physically defectives are concerned. Examinations have been conducted throughout the year by the two Medical Officers appointed, in conjunction with Miss T. M. James, the Supervisor of Defectives, of cases notified to the Education Committee as mentally or physically defective, and the results are tabulated below:—

	Physically Defective.	Mentally Defective.
Children summoned for examination	266	319
Children presented for examination	193	239
Passed as suitable for special schools	97	109
To remain in Elementary Schools	20	35
Unsuitable for any School	15	—
Notified to Lancashire Asylums Board as—		
(a) Imbeciles	—	12
(b) Idiots	—	2
(c) Moral Imbeciles	—	2
(d) For supervision (16 years of age)	—	2
To be re-examined	22	62
Passed for Open-air Schools	26	—
Passed for Residential Schools	—	12
Passed for Epileptic School	6	—
Miscellaneous	7	3

In addition to new cases, the children already in Special Schools were examined both as to their mental and physical condition, as required by the Act of 1899, the visits to the schools and the number examined being:—

	Physically Defective.	Mentally Defective.
No. of Visits	26	16
Children examined	833	346

Those requiring treatment were dealt with at the Clinics established by the Education Authority or at local Hospitals in cases where there was no arrangement made by the Education Authority to meet such cases.

The "following-up" Nurse has all these cases under review, and during the year has made visits as follows:—

	Cases.	Visits.
Dental cases	182	237
Eye cases	115	197
Ear cases	13	30
Skin cases	11	18
Tonsils and Adenoids cases	28	57
Orthopœdic cases	178	286
Temporarily absent and unsuitable cases	96	123
Cases passed for Ordinary Schools	133	149
Reserve Register cases	68	82
Miscellaneous visits of enquiry	—	562
	824	1,741

At the Education Authority's residential school for physically defective children, the same plan has been observed as in former years of dividing the year into four terms, boys and girls being alternately in residence during two successive terms. A total of 149 children passed through this school in the course of the year, and of this number 46 (31 per cent.) were pronounced fit to leave the Special Schools and to return to ordinary elementary schools.

In addition to the Special Schools, the Authority maintains six beds at the West Kirby Convalescent Home (mainly for surgical tuberculosis cases) and six beds at the Liverpool School of Recovery (mainly heart cases), and they have secured the option of six places at the Maghull Home for Epileptics. During the course of the year, 12 cases have been in residence at West Kirby School and 9 at the School of Recovery, while 4 cases were sent to the Home for Epileptics.

With regard to the education of the deaf, the Education Committee have one Day School at which 80 Liverpool children are taught, some 15 of these being boarded by the Committee in an Institution for the Deaf close to the Day School. For Roman Catholic deaf children, the Committee pay for their board and education at Boston Spa; at the end of the year there were 19 Liverpool children boarded there.

Blind children are educated at the Blind School at Wavertree, either as boarders or as day scholars; or in the case of Roman Catholic blind children at the Catholic Blind Asylum, Brunswick Road. At the end of the year there were 31 Liverpool children, of whom 6 were day scholars, taught at Wavertree, and 19 at the Catholic Blind Asylum; a total of 50. Children who are partially blind require teaching in special classes, neither the Blind School methods nor those at the Elementary Schools being suitable.

Whilst it is realised that at the moment it is difficult for the Education Authority to embark on new enterprises, it is necessary to keep in mind certain important developments which should be brought forward at the first available opportunity. These include, for example: (*a*) special treatment for stammerers and treatment of other speech defects, (*b*) the introduction of remedial exercises, and (*c*) the establishment, in connection with the ordinary elementary schools, of classes for dull and backward children.

Defective Vision Classes.

The two classes held at the Birchfield Road Council School for children with seriously defective vision have been continued with great advantage to the pupils. The number on the rolls was 50, the average attendance being 41, and the average age of the children 12 years. Three-fifths of the children are girls, this being approximately the proportion of girls reported as requiring this form of education. Exactly half of those on the rolls are cases of myopia.

Awaiting admission to these classes at the end of the year were 238 children, of whom 80 (28 boys and 52 girls) were urgent cases. Of these 80 children, 34 are on the rolls of Council schools,

26 attend Roman Catholic schools, 19 Church of England schools, whilst one is not on the rolls of any school.

Of the cases referred as suitable for these classes more than 80 per cent. were, as far as present knowledge goes, entirely unpreventible, and none are in a communicable condition.

It is much to be regretted that no additional classes have yet been provided for these children, the matter having been urgent for years, and the Committee having nearly four years ago authorised additional provision. As the matter stands at present the classes are only available for children attending Council schools, unless by special permission of the Committee on the written application of the parents. There is especially need for accommodation for children attending Church of England and Roman Catholic schools, preferably in the same building with, and as part of the organisation of, some of the Public Elementary Schools, as in the case of the classes at Birchfield Road.

EMPLOYMENT.

The new Bye-Laws regulating the employment of children under the age of 14, framed under the Employment of Children Act, 1903, and the Education Act, 1918, came into force on February 1st, 1921. The Bye-Laws provide for the registration of employers and children employed (excepting certain minor employments), the employer being required to have available for inspection a notice containing particulars as to the name, age, and address of the child employed, and the nature and hours of employment, whilst the child has to have during the time of employment always with him or her an "Employment card," which is issued by the Education Authority.

The Bye-Laws prohibit altogether employment in the following occupations:—

(*a*) in, or in connection with, the sale of intoxicating liquors;

(*b*) in selling programmes or refreshments or other articles or taking checks or tickets or in shifting scenery in any theatre, cinematograph hall, or other place of public entertainment;

(*c*) as a billiard or bagatelle score marker or attendant in any billiard saloon or other place licensed for games, or in any registered club or premises licensed for the sale of intoxicating liquors;

(*d*) as an attendant or assistant in any shop or hall used for the purpose of public amusement, by means of automatic machines, mutoscopes, shooting ranges, games of chance or skill, or similar devices;

(*e*) in the kitchen of any hotel, cookshop, eating-house or refreshment room;

(*f*) in the collection or sorting of rags or refuse;

(*g*) in lathering or any similar occupation in a barber's shop.

Employment before the close of school hours is limited to the delivery of milk or newspapers and to domestic work, and in each case a certificate of fitness must be obtained from a School Medical Officer before such work can be undertaken. The examinations for these certificates were carried out during the year in the case of 1,315 children, certificates being refused in only 17 cases. Of all the children employed, those working before the close of school hours were, as a general rule, amongst the healthiest and best cared for attending the schools in question.

From a return made to the School Attendance and Care Sub-Committee it appears that during the year 2,922 children, of whom 2,602 were boys, were employed some time during the year, whilst at the end of the year there were still employed 1,698 children, *i.e.*, 5·9 per cent. of the children of the ages of 12 and 13 on the rolls. These figures shew a marked decline in the numbers employed in pre-war and early war days, when shops were frequently kept open till late at night. The last detailed figures available are for April, 1915, when 3,082 children were employed. The employments which shew the greatest falling off are those in connection with butchers', bakers', greengrocers', grocers' and chandlers' shops, whilst employment in barbers' shops, in which 164 boys were working in 1915, is now prohibited.

Perhaps the hardest form of employment is in connection with the delivery of coal from small coal dealers' yards, and special attention is being paid by the official visitors to this form of work, and by the School Medical Officers to the children so employed.

On the whole the new Bye-Laws have so regulated the employment that no deleterious results can follow in the case of healthy children, but occasionally children with physical defects are met with for whom it is necessary to restrict the amount of work or prohibit employment altogether.

The medical examinations of the children, with a view to the granting of certificates of fitness for employment before school hours, and the constant supervision of all employed children at the inspections at the schools, have added considerably to the work of the Medical Department during the year.

A few special examinations have been made during the year with regard to the licensing of certain children of school age for theatrical performances. These children go on tour from town to town, and are required by the regulations to be examined every three months during the period covered by the licence by the School Medical Officer of some Local Authority. Provided that the School Medical Officer certifies that such performances will not adversely affect the child physically or educationally, authorities are permitted to grant licences up to 10 p.m. or, in special conditions, to 11 p.m.

At the present time there is, in this matter, want of uniformity on the part of Local Authoriites, some allowing the children to remain at the theatre until after 10 p.m., others, having more in view the interests of the children, being disposed to limit the hours.

The holder of the licence is required to supply to the Authority full particulars of each case a week before the performance is due, so that the necessary arrangements may be made for the regular attendance at the school of the child in question, the inspection as to suitability of the house where the child will stay, and, if necessary, for the medical examination of the child. Unfortunately, with the documents sent, the School Medical Officers' past certifi-

cates are not included, and children not previously examined in the area bring with them, therefore, no notes which would give an indication of any particular tendency to defect or precaution necessary.

During the year approximately 77 licensed children performed at places of entertainment in Liverpool. Twelve children resident in Liverpool applied for licences and were medically examined, but there was little to complain of, physically, with regard to these children beyond certain minor defects for which treatment was promised.

In granting medical certificates, one has to bear in mind the fact that though the children may leave the theatre at 10 p.m., the home may be half-an-hour's journey from the theatre, and that the children, therefore, probably do not get to bed before 11 p.m., whilst on each following day the children have to put in a full day's schooling, except on Saturdays and Sundays and during holidays.

On the whole it must be considered that the regulations require some further tightening with regard to hours and to the need for transference of the previous reports of various School Medical Officers which might, with advantage, be endorsed on the licence.

After leaving school a large proportion of the children enter their names with the Juvenile Employment Bureau at the Education Office, with a view to securing employment. Of approximately 8,000 children registering in the course of the year 6,000 were under the age of 15.

One very noticeable feature due to the prevailing unemployment is the failure of the undersized and subnormal boy to obtain work. Even in ordinary times this type of lad had little to commend him, and he usually gravitated to the class of job that demanded little mental or physical exertion. For the first few years after leaving school he would usually work as a messenger or errand boy, or undertake simple factory work, drifting later on to an occupation of an unskilled character, the nature of which depended largely upon the extent to which he had developed physically. To these lads the

post-war period has proved particularly unfortunate, and many cases have come to the notice of the Juvenile Employment Department where no employment whatever has been found for a year or more, while others have only been able to obtain short spells of work with long intervals between. If the case of the normal boy, who has difficulty in finding employment when school life is finished, presents a regrettable spectacle, that of the sub-normal boy may truly be said to be tragic and a menace to the well-being of the community. It may be said that one of the greatest difficulties experienced is in keeping in touch with unemployed boys and girls for more than a month or two at a stretch.

Of the boys placed 44 per cent. obtained posts as clerks, 22·6 per cent. as shop boys, various types of messengers, &c., 7·5 per cent. at trades, 7·5 per cent. at workshops, factories, &c.

The Education Committee recently decided to undertake all the duties, hitherto shared with the Labour Exchange, of securing places for young persons under the age of 18, together with the administration of the Unemployment Insurance Act so far as it affects Juveniles.

In connection with the placing of the cases, all the medical records and notes of the School Medical Officers are available for the use of the Juvenile Employment Department and are freely used, whilst occasionally special examinations are made by the Medical Officers at the request of that Department.

VENTILATION.

Towards the end of the year some experiments were made to test the respective merits of the ordinary sash windows and vertically-pivotted windows from the point of view of ventilation. It so happened that there was one school building in which certain rooms were fitted with sash windows and adjacent rooms with the vertically-pivotted windows, and two adjacent rooms, approximately the same size, on the first floor of this school, were chosen for the experiment. The outside conditions were favourable, there being a gentle breeze, but the direction of the breeze was not such as to interfere with the experiment.

Room A was fitted with two vertically-pivotted windows and two sash windows; Room B with four sash windows with hinged-top ventilators above and a fanlight over the door in the wall opposite the windows. In each room was a fireplace and a ceiling ventilator.

Three separate experiments were carried out, the rooms being thoroughly flushed with air after each experiment.

Experiment No. 1. In Room A the two vertically-pivotted windows were opened to their fullest capacity, and in Room B the two corresponding sash windows and the ventilators above were opened as wide as possible, and the fanlight above the door also opened. Two smoke rockets were ignited in each room almost simultaneously, the rockets burning for about four minutes and generating equal volumes of smoke. In thirteen minutes after the rockets had burnt out the rooms were entered, and Room A was then slightly clearer of smoke than Room B so far as sight was concerned, and markedly so judging from the sense of smell.

Experiment No. 2 was carried out under similar conditions to No. 1, except that the fanlight over the door was kept closed and only one smoke rocket was used in each room. This experiment was done with a view to testing the comparative values of the two systems when there is no cross ventilation in either case. Firstly, it was noticed that whereas in Room A the distribution of the smoke over the room soon became uniform, in Room B the distribution took about two minutes longer, and the smoke appeared to circulate up and down close to the open windows. Eight minutes after the smoke ceased to be generated Room A was distinctly clearer to sight and smell than Room B. The fanlight in Room B was then opened, and after a further eight minutes there was still a strong smell of smoke in the room.

Experiment No. 3 was conducted with the object of giving Room B every possible advantage over Room A by fully opening all four sash windows and ventilators above, the fanlight above the door being also fully opened. In Room A the conditions

were as in the previous experiments. One smoke rocket was burnt in each room. In three minutes after these ceased burning Room A appeared to be somewhat clearer than Room B, but when both rooms were entered after eight minutes there was no perceptible difference noticed in the two rooms.

Conclusion. Each experiment demonstrates that under atmospheric conditions as on the day in question, viz., slight movement of air, the direction of the breeze being such that it did not blow directly on or along the walls bearing the ventilating windows, the ventilation was more satisfactory in the room with vertically-pivotted windows, and further, that it was necessary to increase the number of open sash windows and top ventilators to double the number and area of the vertically-pivotted windows before the ventilation in the two rooms was approximately equal. It is reasonable to assume that with a breeze blowing directly on, or one blowing parallel with the wall carrying the windows, the result would be even more in favour of the vertically-pivotted windows.

PROVISION OF MEALS.

Free meals are provided for necessitous children on week days and during school holidays, the numbers attending during holidays being about half those attending during school terms.

Head Teachers, on being satisfied that a child is in need, are permitted to issue coupons provisionally, reporting the case to the Director of Education at the end of the week. Full enquiries by the School Attendance Staff into the family circumstances are then made. The cases are then submitted to a Rota of the Children's Meals Sub-Committee, who decide for what period the coupons shall be continued, if allowed. Except in very special cases, this period never extends beyond two months, at the end of which the family circumstances are again investigated.

In deciding the cases the Children's Meals Sub-Committee are guided by the family income per head, after deducting the rent. Save in exceptional circumstances, free meals are not granted if the income per head exceeds a certain figure.

No charge is made to the parents, but meals are declined if it is considered that the parents are in a position to pay.

In cases found to be receiving Poor Law Relief the Guardians are notified, and if they report that the relief granted is adequate, meal coupons are refused. The Liverpool Council of Voluntary Aid is also informed of the cases on the Free Meals Register.

Before any prolonged holiday, the Head Teachers are requested to submit lists of children who, in their opinion, would suffer if meals were discontinued during the vacation.

The meals were cooked at four of the Day Industrial Schools and three of the Special Schools, and from these schools, which also acted as feeding centres, the food, except in the case of the outskirts, was distributed to seven other feeding centres.

The numbers of children receiving free meals gradually rose from an average of 671 in the middle of January to 2,454 in June, owing largely to the Coal Strike. After the summer holidays the numbers were higher owing to the prevailing unemployment, the highest average was 2,703 at the beginning of October: subsequently the numbers gradually diminished to 1,891 towards the end of December, the reduction being mainly due to the Poor Law Guardians providing a more liberal scale of relief. The daily average number of children fed during the year was 1,842.

Girls' Camp.

During the summer between 25 and 30 Liverpool school girls, nominated by the Head Teachers, were, with the sanction of the Education Committee, sent weekly to a Girls' Camp provided at Wallasey by private generosity.

These girls have been for the past two years examined and passed by one of the School Medical Officers before going to the Camp. Some 344 were examined in 1921, a small number having to be refused on medical grounds or on account of being in an unclean condition.

E. W. HOPE,

Medical Officer to the Education Authority.

APPENDIX A.

ELEMENTARY SCHOOLS.

Table I.

Number of Children Inspected, 1st January 1921 to 31st December, 1921.

A.—Routine Medical Inspection.

Age.	Entrants.					
	3.	4.	5.	6.	Other Ages	Total
Boys	—	473	4,847	2,408	690	8,418
Girls	—	460	4,764	2,483	651	8,358
Totals	—	933	9,611	4,891	1,341	16,776

Age.	Intermediate Group.	Leavers.			Other Ages.	Total.	Grand Total.
	8.	12.	13.	14.			
Boys	5,997	5,434	1,216	60	483	13,190	21,608
Girls	6,132	5,652	1,288	49	382	13,503	21,861
Totals ...	12,129	11,086	2,504	109	865	26,693	43,469

B. –Special Inspections.

	* Special Cases.	Re-examinations.
Boys	7,683	37,846
Girls	6,112	34,436
Totals	13,795	72,282

* Not including children treated at Minor Ailments Clinics.

C.—Total number of Individual Children Inspected by the Medical Officer, whether as Routine or Special Cases (No child being counted more than once in one year).

No. of Individual Children Inspected.
55,508 †
82,444 *

Note: † Routine and new Special Cases only.
* Including also all children re-examined.

Table II.

Return of Defects Found in the Course of Medical Inspection in 1921.

Defect or Disease.	Routine Inspections.		Specials.	
	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.
(1)	(2)	(3)	(4)	(5)
Malnutrition	21	¶ 529	29	¶ 115
Uncleanliness—				
Head	5,423	14	112	—
Body	2,876	—	99	—
Skin—				
Ringworm—				
Head	58	—	266	231
*Body	5	22	14	39
Scabies	96	—	1,026	278
*Impetigo	34	170	51	209
*Other Diseases (Non-Tubercular) ...	57	275	61	366
Eye—				
*Blepharitis	80	346	48	168
*Conjunctivitis	30	145	46	185
*Keratitis	2	8	3	15
*Corneal Ulcer	4	14	4	27
Corneal Opacities	—	9	—	4
†Defective Vision	2,376	2,805	2,787	1092
Squint	574	465	575	143
Other Conditions	21	144	22	63
Ear—				
Defective Hearing	38	299	37	92
Otitis Media	104	536	65	182
Other Ear Diseases	149	141	19	45
‡Nose and Throat—				
Enlarged Tonsils	407	2,765	184	221
Adenoids	198	266	182	73
Enlarged Tonsils and Adenoids ...	210	198	193	24
Mouth Breathing	1,170	1,079	248	139
Other Conditions	7	39	3	16
Enlarged Cervical Glands (Non-Tubercular)	31	1,916	11	224
Defective Speech	11	319	8	132
§Teeth (Dental Diseases)	1,968	4,121	164	233

Table II.—Continued.

Defect or Disease. (1)	Routine Inspections. Number referred for Treatment. (2)	Routine Inspections. Number requiring to be kept under observation, but not referred for Treatment. (3)	Specials. Number referred for Treatment. (4)	Specials. Number requiring to be kept under observation, but not referred for Treatment. (5)
Heart and Circulation—		¶		¶
Heart Disease—				
Organic	5	71	4	43
Functional	29	670	9	97
Anaemia	98	688	53	203
Lungs—				
Bronchitis	83	282	16	168
Other Non-Tubercular Diseases	14	1,211	14	96
Tuberculosis—				
Pulmonary—				
Definite	—	6	8	57
Suspected	—	6	4	31
Non-Pulmonary—				
Glands	2	25	5	49
Spine	—	—	—	12
Hip	—	6	1	8
Other Bones and Joints	—	3	1	24
Skin	—	1	1	6
Other Forms	—	2	—	16
Nervous System—				
Epilepsy	—	22	4	26
Chorea	2	24	8	43
Other Conditions	—	100	5	58
Deformities—				
Rickets	18	228	3	48
Spinal Curvature	9	59	2	8
Other Forms	24	137	6	54
Other Defects and Diseases	219	1,887	164	1,033

Number of Individual Children having Defects which required Treatment or to be kept under Observation (excluding children treated at the Minor Ailments Clinics) 27,852

* Exclusive of children treated at the Minor Ailments Clinics. For these, see page 13.

† The figures for defective vision do not involve the children suffering from squint.

‡ Under the heading "Nose and Throat," no individual child appears under more than one of the sub-headings.

§ Cases examined by the School Medical Officers

¶ Many of the cases in columns (3) and (5) were not referred for treatment as they were already receiving treatment.

Table III.

Numerical Return of all Exceptional Children in the Area in 1921.

			Boys.	Girls.	Total
Blind (Including partially blind) within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.		Attending Public Elementary Schools	110	128	238
		Attending Certified Schools for the Blind	34	24	58
		Attending Defective Vision Class ...	19	31	50
		Not at School	12	13	25
Deaf and Dumb (Including partially deaf) within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.		Attending Public Elementary Schools	—	—	—
		Attending Certified Schools for the Deaf	60	55	115
		Not at School	6	9	15
Mentally Deficient.	Feeble-minded.	Attending Public Elementary Schools	211	173	384
		Attending Certified Schools for Mentally Defective Children ...	319	223	542
		Notified to the Local Control Authority by Local Education Authority during the year... ...	8	7	15
		Not at School	22	26	48
	Imbeciles.	At School	—	—	—
		Not at School	31	19	50
		Notified to Lancs. Asylums Board ...	17	16	33
	Idiots.	... ...	10	7	17
		Notified to Lancs. Asylums Board ...	—	4	4
Epileptics.		Attending Public Elementary Schools	5	5	10
		Attending Certified Schools for Epileptics	3	—	3
		In Institutions other than Certified Schools	2	2	4
		Not at School	25	32	57
Physically Defective.	Pulmonary Tuberculosis.	Attending Public Elementary Schools	—	—	—
		Attending Certified Schools for Physically Defective Children ...	—	—	—
		In Institutions other than Certified Schools	57	48	105
		Not at School	179	207	386
	Crippling due to Tuberculosis.	Attending Public Elementary Schools	37	33	70
		Attending Certified Schools for Physically Defective Children ...	64	47	111
		In Institutions other than Certified Schools	29	30	59
		Not at School	64	70	134
	Crippling due to causes other than Tuberculosis, i.e., Paralysis, Rickets, Traumatism.	Attending Public Elementary Schools	203	141	344
		Attending Certified Schools for Physically Defective Children ...	140	113	253
		In Institutions other than Certified Schools	31	17	48
		Not at School	70	111	181
	Other Physical Defectives e.g., delicate and other children suitable for admission to Open Air Schools; children suffering from severe heart disease.	Attending Public Elementary Schools	139	196	335
		Attending Open Air Schools	26	6	32
		Attending Certified Schools for Physically Defective Children, other than Open Air Schools ...	85	122	207
		Not at School	141	217	358

Table IV.—Treatment of Defects of Children during 1921.

A.—Treatment of Minor Ailments.

Disease or Defect.	Number of Children.										
	Referred for Treatment			Treated.			Improved without special treatment	No. of defects not treated and still unimproved.	Total reported upon.	No. of defects for which no report is available.	Percentage treated of cases reported upon.
	From previous year.	1921 cases.	Total	Under Local Education Authority's Scheme.	Otherwise.	Total					
Skin :—											
Ringworm (head) ...	244	555	799	173	562	735	—	25	760	39	96·7
Ringworm (body) ...	6	398	404	377	13	390	—	—	390	14	100·0
Scabies	60	206	266	—	209	209	—	6	215	51	97·2
Impetigo	28	6,737	6,765	6,632	49	6,681	—	6	6,687	78	99·9
Minor Injuries ...	—	1,778	1,778	1,777	—	1,777	—	—	1,777	1	100·0
Other Skin conditions	2	1,363	1,365	1,219	72	1,291	5	8	1,304	61	98·9
Ear Disease	436	2,181	2,617	1,672	330	2,002	52	210	2,264	353	88·4
Eye Disease ... ... (External and others)	247	2,930	3,177	2,666	225	2,891	24	71	2,986	191	96·8
Miscellaneous... ...	7	187	194	168	5	173	—	7	180	14	99·4
Totals	1,030	16,335	17,365	14,684	1,465	16,149	81	333	16,563	802	97·5

B.—Treatment of Visual Defects.

	NUMBER OF CHILDREN.															Percentage treated of cases reported upon.
	Referred for Refraction.			Submitted to Refraction.				For whom glasses were prescribed.	For whom glasses were provided.	Recommended for treatment other than by glasses.	Received other forms of treatment.	For whom no treatment was considered necessary.	Improved without special treatment.	Not treated, and not improved.	Total reported upon.	No report available.	
	From previous year.	1921 cases.	Total.	Under Local Education Authority's Scheme.	By Private Practitioner or Hospital.	Otherwise.	Total.										
New Cases	3,079	5,036	8,115	4,149	294	51	4,494	4,332	4,332	17	7	*162	90	1,363	5,947	2,168	75·5
Re-examination Cases	47	1,863	1,910	1,565	91	30	1,686	1,414	1,399	10	11	†272	4	15	1,705	205	98·8
Totals.....	3,126	6,899	10,025	5,714	385	81	6,180	5,746	5,731	27	18	434	94	1,378	7,652	2,373	80·8

* Includes 13 cases to "Continue with glasses previously obtained." † Includes 231 cases to "Continue with glasses previously obtained."

C.—Treatment of Defects of Nose and Throat.

Disease or Defect.	Number of Children.											
	Referred for Treatment.			Received Operative Treatment.								
	From previous year.	1921 cases.	Total.	Under Local Education Authority's Scheme.	By private Practitioner or Hospital.	Total.	Received other forms of treatment.	Improved without special treatment.	Not treated.	Total Reported upon.	No. of defects for which no report is available	Percentage treated of cases reported upon.
Enlarged tonsils and adenoids	1,939	2,058	3,997	1,719	339	2,058	32	319	955	3,364	633	62·1
Mouth breathing ...	1,999	1,812	3,811	—	—	—	973	740	837	2,550	1,261	38·1
Totals ...	3,938	3,870	7,808	1,719	339	2,058	1,005	1,059	1,792	5,914	1,894	51·7

D.—Treatment of Dental Defects.

1.—Number of Children dealt with.

	Age Groups.										Specials.	Total.
	5	6	7	8	9	10	11	12	13	14		
(*a*) Inspected at the Schools	2	4,668	5,071	4,806	4,063	2,903	—	—	—	—	43	21,556
(*b*) Referred for treatment					17,718	...	...	...	...	...	32	17,750
(*c*) Actually treated at Clinics					5,859	...	...	...	...	...	—	5,859
(*d*) Re-treated* (result of periodical examination)					1,608	...	...	...	...	...	—	1,608

* Also included in (*c*) above.

2.—Particulars of the Time given and of Operations undertaken.

Clinic.	No. of Half-days devoted to Inspection	No. of Half-days devoted to Treatment	Total No. of attendances made by theChildren at the Clinic.	No. of Permanent Teeth.		No. of Temporary Teeth.		Total No. of Fillings.	No. of Administrations of General Anæsthetics included in (4) and (6)	No. of Other Operations	
				Extracted.	Filled.	Extracted.	Filled.			Permanent Teeth.	Temporary Teeth.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Addison Street ...	198	125	1,370	130	717	1,816	124	841	645	27	17
Dental Hospital...		259	2,513	185	1,069	3,065	175	1,244	1,293	21	—
St. Gabriel's ...		259	3,398	212	1,360	4,400	537	1,897	1,527	122	36
Timpron Street ...		131	1,680	130	542	2,521	258	800	709	10	8
Netherfield Road..		86	1,029	52	443	1,582	73	516	499	20	8
Total ...	198	860	9,990	709	4,131	13,384	1,167	5,298	4,673	200	69

F. - Treatment of all other Defects.

Disease or Defect.	Number of Children.										
	Referred for Treatment			No. of defects for which no report is available	Number reported upon.	No. of defects treated.	Results of Treatment.		Improved without special treatment.	No. of defects not treated and still unimproved.	Percentage treated of cases reported upon.
	From previous year.	1921 cases.	Total.				Remedied.	Improved.			
Malnutrition ...	82	178	260	100	160	112	62	50	17	31	70·0
Serious Eye Conditions ...	3	5	8	4	4	4	4	—	—	—	100·0
Enl. Cerv. Glands (Non-Tuberculous) ...	35	42	77	27	50	22	14	8	7	21	44·0
Speech	8	11	19	7	12	4	2	2	4	4	33·3
Hearing	63	63	126	32	94	32	23	9	42	20	34·0
*Teeth	6,060	2,812	8,872	2,207	6,665	2,628	1,742	886	1,486	2,551	39·4
Heart & Circulation											
Organic	—	5	5	1	4	—	—	—	—	4	—
Functional	6	7	13	5	8	3	2	1	2	3	37·5
Anæmia	213	265	478	174	304	172	95	77	73	59	56·5
Lungs—											
Non-Tuberculous ...	185	69	254	113	141	87	78	9	25	29	61·7
Tuberculosis—											
Pulmonary, definite ...	3	5	8	1	7	6	1	5	—	1	85·7
,, suspected ...	—	5	5	5	—	—	—	—	—	—	—
Glands	4	11	15	5	10	9	8	1	—	1	90·0
Spine	—	1	1	—	1	—	—	—	—	1	—
Hip	—	2	2	1	1	—	—	—	—	1	—
Other bones & joints...	1	1	2	—	2	2	2	—	—	—	100·0
Skin...	—	1	1	1	—	—	—	—	—	—	—
Other forms ...	—	2	2	—	2	2	—	2	—	—	100·0
Nervous System—											
Epilepsy	—	1	1	1	—	—	—	—	—	—	—
Chorea	14	11	25	11	14	11	9	2	1	2	78·6
Other conditions ...	1	4	5	2	3	1	—	1	2	—	33·3
Deformities—											
Rickets	24	44	68	32	36	16	8	8	3	17	44·4
Spinal Curvature ...	30	9	39	6	33	9	5	4	6	18	27·3
Other forms ...	46	49	95	23	72	34	21	13	11	27	47·2
Other defects & diseases...	282	396	678	305	373	180	154	26	46	147	48·5
Totals	7,060	3,999	11,059	3,003	7,996	3,334	2,230	1,104	1,725	2,937	41·7

TABLE V.

Summary of Treatment of Defects as shown in Table IV. (A, B, C, D & F, but excluding E).

Disease or Defect.	Number of Children.										
	Referred for Treatment			Treated.			Improved without special treatment.	No. of defects not treated and still unimproved.	Total reported upon.	No. of defects for which no report is available.	Percentage treated of cases reported upon.
	From previous Year.	1921 cases	Total.	Under Local Authority's Education Scheme.	Otherwise.	Total.					
Minor Ailments ...	1,030	16,335	17,365	14,684	1,465	16,149	81	333	16,563	802	97·5
Visual Defects— New cases	3,079	5,036	8,115	4,149	345	4,494	90	1,363	5,947	2,168	75·5
Re-examination cases	47	1,863	1,910	1,565	121	1,686	4	15	1,705	205	98·8
Defects of Nose and Throat— Enlarged tonsils and adenoids	1,939	2,058	3,997	1,719	371	2,090	319	955	3,364	633	62·1
Mouth Breathing ...	1,999	1,812	3,811	—	973	973	740	837	2,550	1,261	38·1
Dental Defects— Dentists' cases ...	5,312	17,750	23,062	5,859	3,055	8,914	—	7,364	16,278	6,784	54·8
School Medical Officers' cases ...	6,060	2,812	8,872	—	2,628	2,628	1,486	2,551	6,665	2,207	39·4
Other Defects	1,000	1,187	2,187	—	706	706	239	386	1,331	856	53·0
Totals	20,466	48,853	69,319	27,976	9,664	37,640	2,959	13,804	54,403	14,916	69·2

Table VI

Summary relating to Children Medically Inspected at the Routine Inspection during the year, 1921.

(1) The total number of children medically inspected at the routine inspections	43,469
(2) The number of children in (1) suffering from—	
Malnutrition	550
Skin Disease	717
Defective Vision (including Squint)	6,220
Eye Disease	803
Defective Hearing	337
Ear Disease	930
Nose and Throat Disease	6,339
Enlarged Cervical Glands (Non-Tubercular)	1,947
Defective Speech	330
Dental Disease	6,089
Heart Disease—	
Organic	76
Functional	699
Anaemia	786
Lung Disease (Non-Tubercular)	1,590
Tuberculosis—	
Pulmonary—Definite	6
Suspected	6
Non-Pulmonary	39
Diseases of the Nervous System	148
Deformities	475
Other Defects and Diseases	2,106
(3) The number of children in (1) suffering from defects (other than uncleanliness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment) ...	10,910
(4) The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.)	7,109
(5) The number of children in (4) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.) ...	1615

APPENDIX B.

HIGHER SCHOOLS.

Number of Children Inspected, 1st January to 31st December, 1921.

TABLE 1.—(A.) (Routine Medical Inspection).

Age.	8	9	10	11	12	13	14	15	16	17	Grand Total.
Boys	59	87	124	192	408	420	361	101	7	1	1,760
Girls	40	50	69	100	231	264	104	35	13	2	908
Total	99	137	193	292	639	684	465	136	20	3	2,668

HIGHER SCHOOLS.

(B.)—Special Inspections.

	Special Cases.	Re-examinations (i.e., No. of children re-examined).
Boys	183	1,748
Girls	104	1,243
Totals	287	2,991

(C.)—Total number of Individual Children Inspected by the Medical Officer, whether as Routine or Special Cases (No child being counted more than once in one year.

No. of Individual Children Inspected.
2,848 †
3,586 *

Note: † Routine and New Special Cases only.
* Includes also all children re-examined.

HIGHER SCHOOLS.

TABLE II.—Return of Defects found in the course of Medical Inspection in 1921.

Defect or Disease	Routine Inspections.		Specials.	
	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.
(1)	(2)	(3)	(4)	(5)
Malnutrition	4	26	—	1
Uncleanliness—				
Head	9	10	4	3
Body	1	—	—	—
Skin—				
Ringworm—				
Head	—	—	1	—
Body	—	1	1	—
Scabies	2	1	1	2
Impetigo	1	1	1	—
Other Diseases (Non-Tubercular) ..	—	30	—	7
Eye—				
Blepharitis	—	8	1	2
Conjunctivitis	2	8	—	1
Keratitis	—	—	—	—
Corneal Ulcers	—	1	—	—
Corneal Opacities	—	—	—	—
Defective Vision	170	392	89	38
Squint	7	11	2	—
Other Conditions	—	17	—	1
Ear—				
Defective Hearing	8	56	—	4
Otitis Media	15	31	—	3
Other Ear Diseases	27	16	3	—
Nose and Throat—				
Enlarged Tonsils	22	171	1	3
Adenoids	7	4	3	2
Enlarged Tonsils and Adenoids ...	3	1	—	—
Other Conditions	—	26	—	6
Mouth Breathing	94	74	11	2

HIGHER SCHOOLS.

TABLE II.—Continued.

Defect or Disease.	Routine Inspections.		Specials.	
	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.
(1)	(2)	(3)	(4)	(5)
Enlarged Cervical Glands (Non-Tubercular)	—	111	—	6
Defective Speech	1	44	4	1
Teeth—				
Dental Diseases	291	208	9	3
Heart and Circulation—				
Heart Disease—				
Organic	3	22	1	8
Functional	10	56	—	4
Anaemia	7	58	3	7
Lungs—				
Bronchitis	—	9	—	1
Other Non-Tubercular Diseases ...	2	24	—	3
Tuberculosis—				
Pulmonary—				
Definite	—	—	—	—
Suspected	—	1	—	—
Non-Pulmonary—				
Glands	—	4	—	—
Spine	—	—	—	—
Hip	—	—	—	—
Other Bones and Joints ...	—	—	—	—
Skin	—	1	—	—
Other Forms	—	4	—	1
Nervous System—				
Epilepsy	—	2	—	—
Chorea...	—	4	—	—
Other Conditions	—	15	—	5
Deformities—				
Rickets	—	22	—	—
Spinal Curvature	7	38	1	—
Other Forms	6	64	1	2
Flat Foot	49	104	2	2
Other Defects and Diseases ...	52	355	4	30
Number of Individual Children having Defects which require Treatment or to be kept under Observation				1,700

Table IV.—Treatment of Defects of Children during 1921.

A.—Treatment of Minor Ailments

Disease or Defect.	Number of Children.										
	Referred for Treatment			Treated.			Improved without special treatment.	No. of defects not treated and still unimproved.	Total reported upon.	No. of defects for which no report is available.	Percentage treated of cases reported upon.
	From previous year.	1921 cases.	Total	Under Local Education Authority's Scheme.	Otherwise.	Total					
Skin :—											
Ringworm (head) ...	1	1	2	—	2	2	—	—	2	—	100·0
Ringworm (body) ...	—	2	2	—	2	2	—	—	2	—	100·0
Scabies	1	4	5	—	5	5	—	—	5	—	100·0
Impetigo	—	3	3	—	2	2	—	—	2	1	100·0
Minor Injuries ...	—	—	—	—	—	—	—	—	—	—	—
Other Skin Conditions	3	—	3	—	3	3	—	—	3	—	100·0
Ear Disease	26	54	80	—	27	27	10	3	40	40	67·5
Eye Disease ... ... (External and others)	2	6	8	2	3	5	—	—	5	3	100·0
Miscellaneous... ...	—	—	—	—	—	—	—	—	—	—	—
Totals	33	70	103	2	44	46	10	3	59	44	77·9

HIGHER SCHOOLS.

B.—Treatment of Visual Defects.

	NUMBER OF CHILDREN.															
	Referred for Refraction.			Submitted to Refraction.				For whom glasses were prescribed.	For whom glasses were provided.	Recommended for treatment other than by glasses.	Received other forms of treatment.	For whom no treatment was considered necessary.	Improved without special treatment.	Not treated, and not improved.	Total reported upon.	No report available.	Percentage treated of cases reported upon.
	From previous year.	1921 cases.	Total.	Under Local Education Authority's Scheme.	By Private Practitioner or Hospital.	Otherwise.	Total.										
New Cases	105	148	253	60	46	28	134	131	131	—	—	3	15	19	168	85	79·7
Re-examination Cases	37	86	123	30	33	10	73	68	68	—	—	5*	—	11	84	39	86·9
Totals.....	142	234	376	90	79	38	207	199	199	—	—	8	15	30	252	124	82·1

* Comprises 5 cases to "Continue with glasses previously obtained."

C.—Treatment of Defects of Nose and Throat.

	Number of Children.											
	Referred for Treatment			Received Operative Treatment.								
	From previous year.	1921 cases.	Total.	Under Local Education Authority's Scheme.	By private Practitioner or Hospital.	Total.	Received other forms of treatment.	Improved without special treatment.	Not treated.	Total Reported upon.	No. of defects for which no report is available	Percentage treated of cases reported upon.
Enlarged tonsils and adenoids	31	45	76	11	18	29	—	17	8	54	22	53·7
Mouth breathing ...	42	116	158	—	—	—	47	33	10	90	68	52·2
Totals ...	73	161	234	11	18	29	47	50	18	144	90	52·8

F.—Treatment of all other Defects.

Disease or Defect.	Number of Children.										
	Referred for Treatment			No. of defects for which no report is available	Number reported upon.	No. of defects treated.	Results of Treatment.		Improved without special treatment.	No. of defects not treated and still unimproved.	Percentage treated of cases reported upon.
	From previous year.	1920 cases.	Total.				Remedied.	Improved.			
Malnutrition	—	7	7	5	2	2	—	2	—	—	100·0
Serious Eye Conditions ...	1	—	1	1	—	—	—	—	—	—	—
Enl. Cerv. Glands (Non-Tuberculous) ...	—	—	—	—	—	—	—	—	—	—	—
Speech	—	—	—	—	—	—	—	—	—	—	—
Hearing...	10	5	15	1	14	11	10	1	—	3	78·6
Teeth	221	334	555	275	280	207	174	33	23	50	73·9
Heart & Circulation—											
Organic	2	—	2	2	—	—	—	—	—	—	—
Functional	3	6	9	6	3	2	1	1	1	—	66·6
Anæmia	18	11	29	7	22	19	13	6	3	—	86·4
Lungs—											
Non-Tuberculous ...	2	1	3	1	2	2	2	—	—	—	100·0
Tuberculosis—											
Pulmonary, definite ...	—	—	—	—	—	—	—	—	—	—	—
,, suspected	—	—	—	—	—	—	—	—	—	—	—
Glands...	—	—	—	—	—	—	—	—	—	—	—
Spine	—	—	—	—	—	—	—	—	—	—	—
Hip	—	—	—	—	—	—	—	—	—	—	—
Other bones & joints	—	—	—	—	—	—	—	—	—	—	—
Skin	—	—	—	—	—	—	—	—	—	—	—
Other forms	—	—	—	—	—	—	—	—	—	—	—
Nervous System—											
Epilepsy	—	—	—	—	—	—	—	—	—	—	—
Chorea...	—	—	—	—	—	—	—	—	—	—	—
Other conditions ...	1	—	1	—	1	—	—	—	—	—	—
Deformities—											
Rickets	—	—	—	—	—	—	—	—	—	—	—
Spinal Curvature ...	3	7	10	7	3	3	1	2	—	—	100·0
Other Forms	17	40	57	32	25	23	11	12	1	1	92·0
Other defects & diseases	23	59	82	42	40	30	26	4	4	6	75·0
Totals	301	470	771	379	392	299	238	61	33	60	76·3

HIGHER SCHOOLS.

TABLE V.

Summary of Treatment of Defects as shown in Table IV. (A, B, C & F.)

Defect or Disease.	Number of Children.										
	Referred for Treatment			Treated.			Improved without special treatment.	No. of defects not treated and still unimproved.	Total reported upon.	No. of defects for which no report is available.	Percentage treated of cases reported upon.
	From previous Year.	1921 cases.	Total.	Under Local Education Authority's Scheme.	Otherwise.	Total.					
Minor Ailments ...	33	70	103	2	44	46	10	3	59	44	77·9
Visual Defects—											
New cases	105	148	253	60	74	134	15	19	168	85	79·7
Re-examination cases	37	86	123	30	43	73	—	11	84	39	86·9
Defects of Nose and Throat—											
Enlarged Tonsils and Adenoids	31	45	76	11	18	29	17	8	54	22	53·7
Mouth Breathing ...	42	116	158	—	47	47	33	10	90	68	52·2
Other Defects	301	470	771	—	299	299	33	60	392	379	76·3
Totals	549	935	1,484	103	525	628	108	111	847	637	74·1

HIGHER SCHOOLS.

Board of Education.—Table VI.—Summary relating to Children Medically Inspected at the Routine Inspections during the year 1921.

(1) The total number of children medically inspected at the routine inspections	2,668
(2) The number of children in (1) suffering from—	
Malnutrition	30
Skin Disease	36
Defective Vision (including Squint)	580
Eye Disease	36
Defective Hearing	64
Ear Disease	89
Nose and Throat Disease	402
Enlarged Cervical Glands	111
Defective Speech	45
Dental Disease	499
Heart Disease—	
Organic	25
Functional	66
Anaemia	65
Lung Disease (Non-Tubercular)	35
Tuberculosis—	
Pulmonary—Definite	—
Suspected	1
Non-Pulmonary	9
Disease of the Nervous System	21
Deformities	290
Other Defects and Diseases	407
(3) The number of children in (1) suffering from defects (other than uncleanliness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment)	834
(4) The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.)	637
(5) The number of children in (4) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.)	108

APPENDIX C.

REPORT BY THE INSPECTOR OF PHYSICAL EXERCISES FOR THE YEAR 1921.

STAFF.—The addition of Miss M. Hallett to the Inspectorial Staff, who commenced her duties in January, 1921, has rendered more effective and comprehensive the work of advising teachers in the correct methods of conducting physical training lessons in the City Schools, of organising and supervising teachers' classes, games and swimming instruction.

SYLLABUS.—The Board of Education Syllabus of Physical Training is used throughout the Elementary Schools of Liverpool, uniformity of policy thus being obtained. Teachers recognise that the aim of physical instruction is not to produce a few experts, but to cutivate the physical powers of each individual child. Their recognition of this point is evidenced by the more extensive introduction of team work and group games, the aim being to secure the active participation in games of all pupils.

TEACHERS' CLASSES.—During the Winter Session ending March, 1921, ten Teachers' courses in Physical Training, Games and Dancing were conducted during evenings and on Saturday mornings. Five hundred teachers who attended these classes voluntarily thus had the opportunity of acquiring knowledge of the fresh ideas and new methods suggested in the Board's Revised Syllabus.

For the term September to December, 1921, it was decided to discontinue classes of two hours' duration, which included physical exercise and dancing, taught by separate teachers. Eleven short courses of twelve lessons each were held, the lessons being assigned to various branches of the subject, as follows:—

Three courses of twelve lessons each in Physical Training and Games for Junior and Infant Teachers—duration 1½ hours each.

Four courses of twelve lessons each in Physical Training and Games for Senior Class Teachers—duration 1½ hours each.

Three courses of twelve lessons each in School Dancing and Games—duration 1½ hours each.

One course of twelve lessons in Physical Training and Games for Head and Assistant Masters—duration 1½ hours each.

Over seven hundred teachers applied for inclusion in these classes, and of these 431 were enrolled. The average attendances at all these voluntary classes shewed a great improvement in comparison with similar classes held in previous years.

The following special teachers of Physical Training were appointed by the Education Committee to assist the Inspectors of Physical Training in conducting these courses:—

Miss Donne, Chelsea Physical Training College.
Miss Hassells, Dartford ,, ,, ,,
Miss W. Edwards, Liverpool Physical Training College.
Miss M. Einert, ,, ,, ,, ,,
Miss F. Lewis, Summer Course, Scarborough.
Miss Monteith, ,, ,, ,,
Mrs. F. Bell, ,, ,, ,,

Organised Games for Elementary School Children during School Hours, 1921.

Progress has been made by the Education Committee towards securing playing fields for the special use of the elementary scholars of the City. Sites in five districts have been viewed, and it is expected that on at least four of these sites, viz., Knotty Ash (8 acres), Edge Lane (4 acres), Allerton (8 acres), and Clubmoor (8 acres), land will be definitely assigned for future development as playing fields. When acquired, the full use of these playing fields by the elementary school children will depend on free

transport facilities which it is to be hoped will be granted by the Tramways Committee, as of necessity these open spaces are all a considerable distance from the slum areas of the City.

Meanwhile the Parks and Gardens Committee have continued to grant permission for organised games to be played in various Parks and Open Spaces during school hours under the supervision of teachers. Under this scheme 179 departments out of a total of 257 senior departments have made provision in their time-tables for organised games in other than school playgrounds. The following figures show the extent to which fourteen of these Open Spaces are used:—

Name of Park.	Estimated Play acreage.	No. of Departments			Weekly Total Attendance according to Time Table.
		Mixed.	Boys.	Girls.	
1. Princes Park	*18 acres.	5	14	10	4,417
2. Sefton Park	*40 ,,	5	5	1	3,305
3. Stanley Park	36 ,,	2	10	3	3,844
4. Wavertree Playground	36 ,,	5	4	2	2,774
5. Wavertree Park	*7 ,,	2	4	3	2,591
6. Sheil Park	9 ,,	—	6	5	2,431
7. Kensington Gardens	10 ,,	1	4	6	2,749
8. Lower Breck Recreation Ground	18 ,,	1	6	—	1,329
9. Rupert Lane Recreation Ground	2 ,,	2	5	3	2,042
10. Kirkdale Recreation Ground ...	3 ,,	1	4	5	3,085
11. Newsham Park	7 ,,	2	1	1	1,062
12. Rice Lane Recreation Ground ...	12 ,,	2	2	1	1,559
13. Garston Recreation Ground ...	20 ,,	3	1	1	1,598
14. Woolton Woods	10 ,,	1	1	1	1,443

* Certain portions of these spaces have not been used during the autumn months owing to re-turfing operations.

In addition to the above, 19 other open spaces (some very small) are used successfully for Organised Games and Physical Exercises, by schools which have inadequate playgrounds.

Organised Games in the Public Parks—

Midsummer Holiday, 1921.

The scheme successfully started in 1920 of organising games for the benefit of children of the City who for various reasons are unable to go away for their holidays was repeated during the Summer holiday, 1921. The Education Committee appointed paid Supervisors in five of the most frequented Parks, viz.:—Sefton, Stanley, Princes, Newsham, and Wavertree Playground. The chief attraction to the children proved to be, as was anticipated, the games apparatus which was provided. The provision of storage huts in each of the five Parks proved a boon to the Supervisors, and great appreciation was shewn by the boys of the cane-handled cricket bats which were supplied. The other apparatus supplied was mainly of a simple type, and congratulations are due to the Manual Instruction Centres where it was made.

The Supervisors appointed recognised the possibilities of the situation, and they not only distributed apparatus, but played with the children, coached them in their games, and organised teams, leagues, inter-park matches and sports' days.

There was this year a considerable amount of voluntary help from parents, University students, and onlookers. This is especially pleasing, as in the year 1920 there was no response to advertisements in the papers inviting voluntary assistance.

The children were very conscientious in the returning of apparatus, although allowed to scatter long distances from the huts for their games. The approximate average daily attendances are appended.

		Boys.	Girls.
(*a*) Princes Park	Morning ...	442	82
	Afternoon ...	1,610	262
(*b*) Sefton Park	Morning ...	124	40
	Afternoon ...	447	180
(*c*) Stanley Park	Morning ...	75	24
	Afternoon ...	232	64
(*d*) Sheil Park	Morning ...	58	18
	Afternoon ...	211	34
(*e*) Wavertree Playground	Morning ...	98	35
	Afternoon ...	187	107

		Boys.	Girls.	Total.
Average daily attendance totals	Morning ...	797	199	996
	Afternoon ...	2,687	647	3,334

Games Apparatus.—As mentioned above, the Manual Instruction Centres controlled by the Education Committee have assisted in the supply of games apparatus by making useful articles during their lessons in practical work. The following is a return by the Committee's Inspector of Handicraft of games apparatus made in in the Centres during the year 1921:—

Woodwork:—

Sets of Wickets for Cricket (3)	106
Junior Rounder and Baseball Bats ...	513
Base Posts for Rounders and Baseball ...	302
Net-Ball Posts	94
Football Posts	96
Wicket Blocks	65

Ironwork:—

Angle Irons for base of Football Posts ...	356
Spikes ,, ,, ,, ,, ...	60
Net-Ball Rings	100

Other details of games apparatus supplied by the Education Committee to the Elementary Schools during the past year are enumerated below:—

	£	s.	d.
620 Footballs (various sizes)	260	0	0
2,075 Tennis Balls (covered or uncovered) ...	110	16	0
534 Cricket Balls (composition)	40	0	0
436 Baseballs	32	14	0
25 Tug-of-war Ropes	20	0	0
63 Skipping Ropes (42 feet)	7	5	0
250 ,, ,, (20 feet)	8	11	0
250 Cricket Bats	150	0	0
Balls and Skipping Ropes for Infants' Dept.	93	0	0
Repairs to Cricket Bats	3	7	6
Timber, Iron, etc., used at Manual Centres ...	51	10	0
	£777	3	6

Swimming Instruction—Elementary School—Season, 1921.

The Liverpool Corporation Baths Committee has co-operated with the Education Committee in extending facilities for the free use of the Public Baths of Liverpool by Elementary School children during school hours.

Each Bath has been used to its fullest extent during the summer months, except during the two months when the Coal Strike necessitated the temporary closure of all Baths. As an experiment, the Margaret Street plunge was kept open for the months of

November and December, and good use of it was made by the neighbouring schools. As the experiment has proved popular, it has been deemed worth while to continue it during the remaining winter months.

Instruction in swimming and life-saving has been carried out by the school teachers, and it is pleasing to be able to report that there has been a decided effort by a number of teachers throughout the City not only to teach pupils to swim, but to improve the style of swimming, and to introduce instruction in life-saving methods. It is to be hoped that the number of teachers who systematically teach land drill at school, and swimming exercise at the Baths, will increase as experience is gained.

The healthy competitions conducted by the Teachers' Associations have been instrumental in maintaining a remarkable spirit of keenness in achieving swimming prowess. This is to be noted in schools which have easy access to the Baths, and especially in the Garston district, where considerable added enthusiasm is inculcated by the local Swimming Club, and the advisory expert, Mr. Howcroft.

The smooth working of the Education Committee's scheme of school bathing has been helped by the courtesy shown to teachers and the interest taken in school swimming by the Baths' Superintendents on all occasions. The enthusiasm for swimming is shared almost unanimously by the parents of the children.

The following figures give the numbers of school bathers at the Public Baths for the week, September 26th-30th, 1921. It will be seen that the boys maintain a high attendance, but a much bigger increase is shown by the girls. This increase is expected to continue, and more time and extended facilities will certainly be necessary in Season 1922.

ATTENDANCE FOR THE WEEK ENDING SEPT. 30TH, 1921.

Number of half-days available for:		Name of Bath.	Boys' Attendance	Girls' Attendance.	TOTAL.
Boys.	Girls.				
8	4	Burroughs Gardens ...	1,783	502	2,285
6	2	Cornwallis Street	983	281	1,264
6	3	Garston	954	598	1,552
7	3	Lister Drive	1,205	362	1,567
7	3	Lodge Lane	1,534	550	2,084
9	3	Margaret Street	2,980	632	3,612
5	2	Picton Road	698	366	1,064
8	3	Queen's Drive	612	501	1,113
9	2	Steble Street	2,445	464	2,909
7	3	Westminster Road ...	2,076	917	2,993
—	—				
72	28		15,270	5,173	20,443
Cf. attendance for week in 1920			14,624	3,917	18,541
Do. do. 1919			11,452	2,922	14,374

Thus over 20,000 school children have weekly free accommodation during the summer months in the ten Public Baths under consideration. This is creditable, but when it is known that there are approximately 55,000 children in the City's Elementary Schools over the age of 10 years, it will be seen that accommodation is insufficient, if the ideal " teaching all to swim " is to be aimed at.

The Committee's scheme of school bathing limits the number of children in charge of a teacher to forty, but very frequently two squads of pupils with two teachers have to share the Bath at the same time. This congestion at the Baths does not give the

teachers a fair chance to conduct swimming instruction thoroughly. The Baths where congestion is most frequent are Margaret Street, Burroughs Gardens, Lodge Lane and Steble Street.

It is not generally known that over twenty of the Council Schools of Liverpool had swimming baths constructed as part of the school structures. These are still in existence, and twelve are large enough for swimming instruction, but none of them has been officially used in the last five or six years for reasons of economy and fuel shortage.

Private Hot Baths for Elementary School Children.

Following a report by a School Medical Officer dealing with the necessity for the regular cleansing of a number of children, the Education Committee, in co-operation with the Baths Committee, started a scheme of Private Hot Baths for a limited number of children in the Public Slipper and Spray Baths. Seven Centres have been used throughout the winter months daily between 4 and 5 p.m.

Name of Centre.	Maximum number of children accommodated weekly.	Average Attendance weekly.
1. Lodge Lane	200	156
2. Burroughs Gardens	200	127
3. Westminster Road	144	125
4. Steble Street	320	225
5. Margaret Street	200	121
6. Cornwallis Street	160	118
7. Picton Road	120	66
	1,344	938

The Voluntary Work of the Liverpool Teachers' Association, in connection with the Sports and Swimming of Elementary Scholars out of School Hours, 1921.

Two District Sports' Committees of teachers have successfully organised and conducted games and competitions, out of school hours and on Saturdays, for the Elementary Schools of the City, during the year 1921. The recently formed Association of School Masters (Liverpool Branch of the N.A.S.) confined their efforts to catering for the boys, while the older Association (Liverpool Branch of the N.U.T.) continued and extended the athletic activities of the girls.

Extracts from the Annual Reports of the Sports' Committees of these two Associations are here appended:—

Boys.

"The review of the work accomplished during the first year of the Sports' Committee under the auspices of the Liverpool Association of School Masters cannot fail to give the greatest satisfaction to our members, and the utmost confidence for the future. At no time has a more healthful and vigorous spirit enthused the workers.

"The 1921 Football Competition was highly successful, the all-conquering career of the City team culminating in the winning of the English Schools Championship. The Football Leagues attracted a large number of entries, and this resulted in a most successful series of games. Ninety-three teams entered the competitions (cf., in 1920, 69 teams).

"Similar support was accorded the summer game of Cricket (entries from 71 teams—cf., in 1920, 63 teams) and Baseball (entries from 43 teams—cf., in 1920, 33 teams). The popularity of the latter game extends year by year, and being less costly to run, provides an excellent substitute for Cricket.

"All branches of the boys' Swimming activities flourished (3,166 certificates being awarded), despite the closing of the

Baths during a large part of the swimming season. Considerable numbers qualified for Certificates of Proficiency and Awards of the Royal Life-Saving Society (289 Awards in all), and the Swimming Leagues attracted a big entry. Seven District Galas (3,157 individual entries) were organised, and all achieved a splendid success. Individual championships:—100 yards Free Style, 75 3/5 seconds; 100 yards Breast Stroke, 83 3/5 seconds; 100 yards Back Stroke, 89 4/5 seconds. Many outstanding successes have been gained, notably the English Schoolboy Championship, while the team of six Liverpool schoolboys selected to compete against the pick of the London schoolboys won their inter-city contest with ease.

"Generally considered, your Association may take pride in the fact that there is every evidence that the athletics of our Liverpool boys was never more efficiently organised and supported.

"Capt. R. W. Jones, M.C., *Hon. Sec.*"

Girls.

"The Rounders Leagues have had a most successful season. Thirty-six Senior and twenty-five Junior teams entered, these being the highest numbers ever recorded, showing that the competition is becoming more popular. Four Senior and four Junior Leagues were formed.

"The Girls' Athletic Festival took place on August 31st, and for this occasion a programme differing from those of previous years was arranged. In addition to the Finals of the Senior and Junior Rounders' Competition, there were flat races for squadrons and individuals, and other races requiring both skill and speed. The large number of entries, 63 for inter-school squadron and 921 for individual races, quite justified their inclusion in the programme. A distinctly pleasing feature of the festival was a display of Folk Dancing, in which children from 19 schools took part, and much interest was shown in a demonstration game of Net Ball. In all, about 1,500 girls participated in the festival. A new

competition has been formed for Net Ball, and 19 schools have entered. Twenty-seven schools entered the Swimming League Competitions, that being the largest number of entrants ever recorded. These were divided into six District Leagues. Three Swimming Galas were held (690 girls competed), and some very fine swimming was seen. Individual Championships:—75 yards Breast Stroke, 66 seconds; 75 yards Free Style, 58 seconds. Swimming Certificates awarded, 1,028. Life-Saving Awards, 72.

"Not the least interesting of the competitive Swimming events of the year was the meeting between teams of six London and six Liverpool girls; the London girls, though the losers, beat their own previous record.

A. M. Molloy, *Hon. Sec.*

The Teachers' Associations responsible for this record of voluntary effort by the Elementary School Teachers of Liverpool in developing and extending the athletic activities of the City children out of school hours, have received official letters of congratulation and appreciation from the Education Committee.

ALFRED E. HARRIS,

Inspector of Physical Training.

February 15*th*, 1922.