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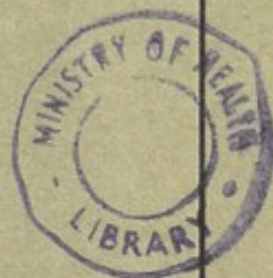
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**COCKERMOUTH
URBAN DISTRICT COUNCIL**



Annual Report

OF THE

Medical Officer of Health

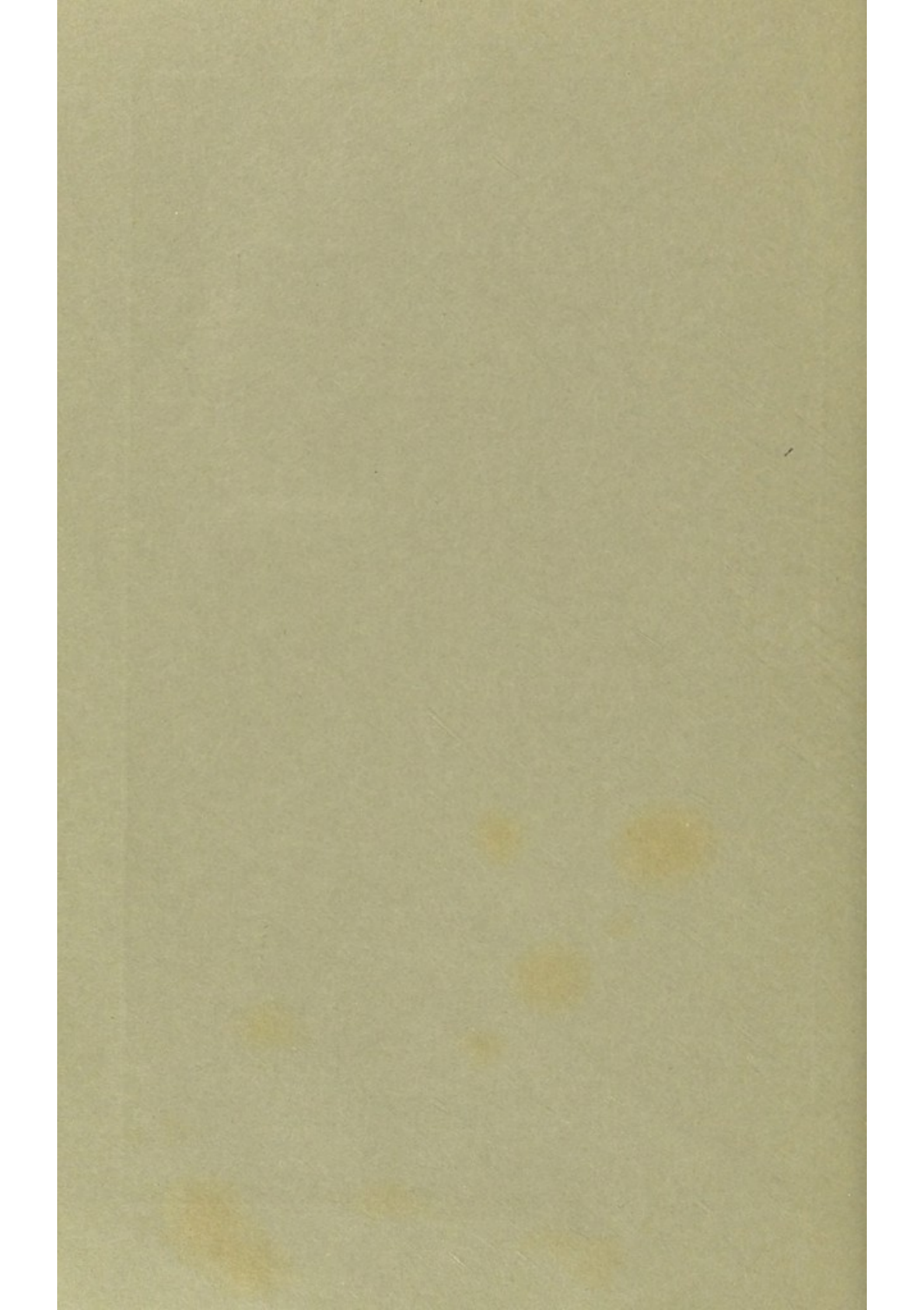
John Patterson, M.B., B.Ch., B.A.O., D.P.H.

FOR THE YEAR 1961

Together with the Summary
of the Public Health

Parry 449

or
(of)



Cockermouth Urban District Council
To the Chairman and Members of the
Cockermouth Urban District Council

Urban District Council of
Cockermouth

ANNUAL REPORTS

of the


Medical Officer of Health

and the

Public Health Inspector

for the year

1961



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Cockermouth Urban District Council

To the Chairman and Members of the
Cockermouth Urban District Council.

Mr. Chairman and Gentlemen,

I have the honour to submit my Eighth Annual Report as Medical Officer of Health to the Cockermouth Urban District Council.

Again the gap between the number of births and the number of deaths widens, the birth rate rising and the death rate falling.

Still births plus deaths in the first week of life together form what are called perinatal deaths and generally, all over the nation, this rate lags behind all other rates in falling, e.g. tuberculosis, maternal mortality etc. This rate indicates the care generally given ante-natally, post-natally, and during the confinement of the mother, plus, of course, the state of her health during pregnancy. This perinatal mortality rate for 1961 was 19.4 per thousand and is good compared with the national rate of 32.2 per thousand live and still births.

These facts point to the problems ahead, in educational provision for the rising number of children, and the specialised housing requirements for an ageing population.

The second part of this report has been prepared by Mr. Pattison, and shows the work undertaken and efficiently carried out by his department during the year.

I would record my appreciation of the co-operation and help which I have received from him at all times and would express my thanks for the help given me by the Clerk and his staff and the continued kindness and helpfulness of the members of the Council.

I am,

Mr. Chairman and Gentlemen,

Your obedient servant,

JOHN PATTERSON,

Medical Officer of Health.

PUBLIC HEALTH STAFF.

MEDICAL OFFICER OF HEALTH :

J. PATTERSON, M.B., B.Ch., B.A.O., D.P.H.

PUBLIC HEALTH INSPECTOR :

J. J. PATTISON, M.R.S.H., M.A.P.H.I., Cert. S.I.B.

COCKERMOUTH URBAN DISTRICT COUNCIL

ANNUAL REPORT

OF THE MEDICAL OFFICER OF HEALTH

For the Year 1961.

GENERAL STATISTICS.

Area : Acres	...	...	...	...	2,040
Registrar General's estimate of resident population (mid 1961)					5,810
Number of inhabited houses (end 1961) according to Rate Books					2,135
Rateable Value	...	...	...		£58,250
Sum represented by Penny Rate (approx.)					£224.

RAINFALL.

Records at 250 feet above sea level :—

1961			Inches of rain.
January	..	..	3.46
February	..	..	2.49
March	..	..	1.61
April	..	...	2.46
May	..	..	1.53
June	...	..	2.02
July	...	..	4.49
August	..	..	4.58
September	..	..	2.96
October	...	..	5.51
November	..	..	3.34
December	..	..	2.54
Total			36.99

POPULATION.

The population figure of 5,810 is given for the year 1961 by the Registrar General and called by him the "Home Population". On this figure the birth and death rates and the incidence of notifiable diseases are based.

The population figure for 1960 was 5,560.

CHIEF OCCUPATIONS OF THE INHABITANTS.

Cockermouth is an old market town (its Royal Charter having been granted in the year 1221). For many years Saw-Mills, Building Contractors, a Brewery and the Railway have employed a considerable number of persons (mainly male) and since 1939 five new works of employment were commenced; one of these, a Blood Manure factory has ceased; the other four are made up of a Shoe and Slipper factory, a Clothing factory, a light Engineering works and a Precast Concrete works, employing altogether over 1,100 persons including a large number of female labour, particularly at the two first-named which also have workers from outside the Urban area. There are as well, of course, those individuals absorbed by the usual businesses and trades of a small country town. A few find employment about the large cattle Mart, whilst a few are engaged in agriculture, and in coal mines, quarries and steelworks outside the district.

STATISTICS.

The Tables of vital statistics are set out below showing birth rates, death rates and rates for maternal and infantile mortality.

Crude birth and death rates are corrected by means of an Area Comparability Factor supplied each year by the Registrar General. They allow for varying age and sex distribution of the population in different areas and enable comparisons to be made with figures for other areas.

This year the factor for births is 0.99 and for deaths 1.05.

The total of live births was 103. This is only the fifth time since records were kept that the number of live births has passed the century, the other years being 1920, 1921, 1946 and 1947. This gives a birth rate of 18.4 per thousand of the population (18.2 corrected) compared with 98 births (rate 17.6, 17.8 corrected) in 1930. Two of the births were illegitimate.

There were no still births during the year, but there were 2 deaths of infants under 1 year of age. Both these deaths occurred in the first week of life, one being due to a congenital malformation of the brain and spinal column, and the other being due to prematurity.

The number of deaths at all ages was 63, giving a death rate of 10.8 per thousand of the population, compared with 14.0 for 1960. This was a decrease of ten deaths in males and five in females.

There were no maternal deaths during the year, nor deaths from tuberculosis.

Cancer deaths fell again to 7, one of these being due to cancer of the lung.

Vital Statistics.

Population of the Urban District is 5,810.

LIVE BIRTHS :—

Year		Males	Females	Total	Grand Total	Rate per 1000 pop. Uncor.	Rate per 1000 pop. Cor.
1956	Legitimate	49	45	94			
	Illegitimate	2	2	4	98	18.5	18.9
1957	Legitimate	50	43	93			
	Illegitimate	0	2	2	95	17.8	18.0
1958	Legitimate	52	30	82			
	Illegitimate	2	1	3	85	15.9	16.1
1959	Legitimate	43	43	86			
	Illegitimate	3	1	4	90	16.6	16.7
1960	Legitimate	46	46	92			
	Illegitimate	2	4	6	98	17.6	17.8
1961	Legitimate	58	43	101			
	Illegitimate	1	1	2	103	18.4	18.2

STILL BIRTHS :—

Year		Males	Females	Total	Grand Total	Rate per 1000 total (live & still) births
1956	Legitimate	0	1	1		
	Illegitimate	0	0	0	1	10.1
1957	Legitimate	2	2	4		
	Illegitimate	0	0	0	4	42.2
1958	Legitimate	0	0	0		
	Illegitimate	0	0	0	0	0
1959	Legitimate	0	2	2		
	Illegitimate	0	0	0	2	21.7
1960	Legitimate	2	1	3		
	Illegitimate	0	0	0	3	29.4
1961	Legitimate	0	0	0		
	Illegitimate	0	0	0	0	0

DEATHS :—

Year	Males	Females	Total	Rate per 1000 pop Uncorrected	Rate per 1000 pop Corrected
1956	35	42	77	14.6	14.6
1957	32	39	71	13.2	13.2
1958	38	39	77	14.3	14.3
1959	37	37	74	13.6	13.6
1960	37	41	78	14.0	14.0
1961	27	36	63	10.8	10.9

MATERNAL MORTALITY :—

Year	Deaths	Rate per 1,000 (live & still) births.
1956	0	—
1957	0	—
1958	0	—
1959	0	—
1960	0	—
1961	0	—

INFANTILE MORTALITY RATES :—

Year	Deaths of Infants under 1 year	All Infants per 1000 live births	Legitimate Infants per 1000 live Legitimate Births	Illegitimate Infants per 1000 live Illegitimate Births
1956	3	31	32	—
1957	4	42	42	—
1958	1	11.8	12.2	—
1959	2	22.2	23.2	—
1960	4	40.5	43.5	—
1961	2	19.4	19.8	—

TUBERCULOSIS DEATH RATE :—

Year	Pulmonary T.B. Deaths	Other T.B. Deaths	Total T.B. Deaths	Pulmonary T.B. Death Rate per 1000 pop.	Total T.B. Death Rate per 1000 pop.
1956	0	0	0	—	—
1957	1	0	1	.19	.19
1958	1	0	1	.18	.18
1959	0	0	0	—	—
1960	0	0	0	—	—
1961	0	0	0	—	—

TABLE OF COMPARATIVE RATES (Uncorrected) :—

BIRTH RATE.

	1956	1957	1958	1959	1960	1961
England and Wales	15.7	16.1	16.4	16.5	17.1	17.4
County of Cumberland	16.9	17.9	17.6	17.7	18.0	17.6
Urban Districts of Cumberland	17.5	18.8	18.0	17.9	18.5	17.8
Cockermouth Urban	18.5	17.8	15.9	16.6	17.6	18.4

DEATH RATE.

	1956	1957	1958	1959	1960	1961
England and Wales	11.7	11.5	11.7	11.6	11.5	12.0
County of Cumberland	12.2	12.1	12.14	11.9	12.0	12.3
Urban Districts of Cumberland	12.3	12.2	12.6	12.6	12.1	12.6
Cockermouth Urban	14.6	13.2	14.3	13.6	14.0	10.8

INFANTILE MORTALITY.

	1956	1957	1958	1959	1960	1961
England and Wales	23.8	23.0	22.5	22.0	21.7	21.4
County of Cumberland	30.4	26.4	28.17	21.09	23.1	22.6
Urban Districts of Cumberland	32.5	25.8	35.1	23.2	29.7	22.4
Cockermouth Urban	30.6	42.0	11.8	22.2	40.5	19.4

CAUSES OF DEATHS, 1961.

Causes of Death	Males. Females.	
	All Causes	...
	27	36
1. Tuberculosis, Respiratory	...	0
2. Tuberculosis, Other	...	0
3. Syphilitic Disease	...	0
4. Diphtheria	...	0
5. Whooping Cough	...	0
6. Meningo-coccal Infections	...	0
7. Acute Poliomyelitis	...	0
8. Measles	...	0
9. Other infective and Parasitic diseases	..	0
10. Malignant Neoplasm, stomach	...	0
11. Malignant neoplasm, lung, bronchus	...	1
12. Malignant neoplasm, breast	...	0
13. Malignant neoplasm, Uterus	...	0
14. Other malignant and lymphatic neoplasms	...	1
15. Leukaemia. Aleukaemia	...	0
16. Diabetes	...	1
17. Vascular lesions of nervous system	...	1
18. Coronary disease, angina	...	11
19. Hypertension with heart disease	...	0
20. Other heart disease	...	2
21. Other circulatory disease	...	2
22. Influenza	...	0
23. Pneumonia	...	0
24. Bronchitis	...	1
25. Other diseases of the Respiratory system	...	1
26. Ulcer of Stomach and duodenum	...	1
27. Gastritis, enteritis and diarrhoea	...	0
28. Nephritis and nephrosis	...	0
29. Hyperplasia of prostate	...	0
30. Pregnancy, childbirth, abortion	..	0
31. Congenital malformations	...	1
32. Other defined and ill-defined diseases	...	2
33. Motor-vehicle accidents	..	2
34. All other accidents	..	0
35. Suicide	..	0
36. Homicide and operations of war	..	0

INFANTILE MORTALITY.

Deaths under 1 year showing varying causes and ages.

Cause of Death	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	1-3 months	3-6 months	6-9 months	9-12 months	Total under 1 year.
Congenital Abnormality	1				1					1
Prematurity	1				1					1
Total	2				2					2

SENILE DEATH RATE.

Age at Death.	Males	Females	Total
65-70 years	3	4	7
70-75 years	5	2	7
75-80 years	5	9	14
80-85 years	0	6	6
85-90 years	1	9	10
90-95 years	0	1	1
Totals	14	31	45

Senile Death Rate 71% of Total Deaths (1960-74.0).

DEATHS FROM VIOLENCE.

Cause		No. of Deaths	% of all causes	Rate per 1000 of population.
Suicide	1961	0	—	—
	1960	0	—	—
Road Traffic Accidents	1961	3	4.4	.52
	1960	0	—	—
Other Violence	1961	0	—	—
	1960	1	1.3	.13
Total	1961	3	4.4	.52
	1960	1	1.3	.13

DEATHS FROM CANCER.

Site of Cancer.		Males	Females	Totals
Alimentary:	Stomach	0	2	2
	Colon	1	2	3
Glandular:	Breast	0	1	1
Respiratory:	Lung	1	0	1
		--	--	--
Totals		2	5	7

Age at Death	Males	Females	Total
Between 40—50	0	1	1
50—60	1	0	1
60—70	0	1	1
70—80	1	1	2
80—90	0	2	2
	--	--	--
Totals	2	5	7

CANCER DEATH RATE 1.2 per 1,000 population (1960—2.2 per 1,000 of population).

Approximately one death in nine was due to Cancer.

INFECTIOUS DISEASE.

The total number of cases of Infectious Disease notified in 1961 was 25. Excluding Measles and Whooping Cough the number was 8.

There were no notifications or deaths from Diphtheria, Poliomyelitis, Typhoid or Puerperal Pyrexia.

There were 6 notifications of Dysentery. This is a welcome decrease in the number of cases of Dysentery compared with previous years.

There were no deaths from Tuberculosis and no new Pulmonary cases were notified.

Two cases of Food Poisoning were investigated with negative results.

CASES ON THE TUBERCULOSIS REGISTER.

			Males	Females	Totals
Pulmonary	..	...	16	10	26
Non Pulmonary	..	..	2	—	2
			—	—	—
Totals	..	..	18	10	28
			—	—	—

In 1960 this total was 36, and in 1959, it was 57.

IMMUNISATION.

SMALLPOX.

Age when vaccinated or re-vaccinated	Number Vaccinated	Number Re-vaccinated
Under 1	25	—
1	1	—
2—4	5	—
5—14	11	—
15 or over	5	8
	47	8

Modern methods of dealing with an outbreak of smallpox do not call for mass vaccination nor do they require a 75% vaccination rate in the area, although this is always a help.

The ring system involves vaccination and observation of all contacts of the first cases, and also of a secondary ring, of contacts of the first ring of contacts. This method protects the community as a whole.

For personal protection, if a person happens to be a contact, vaccination must be performed very early on during the incubation period, and it is here that previous vaccination is valuable.

Immunity from a primary vaccination takes ten days, whereas to obtain immunity from a revaccination it will only take three to five days, and with an incubation period of twelve days it will be seen that revaccination gives more time for full immunity to develop.

Consequently small pox vaccination is advised for personal safety.

There are certain things which should be stressed about vaccination against smallpox.

There are certain ages where the risk of complications arising from primary vaccination are diminished, such as infancy, as opposed to adult years. The safest age would appear to be from 1 to 2 years, whereas the 5—12 years age group is not suitable. As with all drugs, proper selection of cases for vaccination is important, only those in good health being given vaccine. To those with skin diseases, severe or chronic illness, debility, pregnancy, etc.,

and those receiving certain other drugs at the time, vaccination is contra-indicated. If these types of people are in contact with a case of smallpox, then the risks have to be balanced and the lesser risk taken.

In conclusion, it is recommended that primary vaccination of healthy infants is still a very worthwhile procedure.

DIPHTHERIA.

The figures in the table show the number of diphtheria immunisations performed during the year, both primary courses and booster doses.

In all, 147 children completed a primary course and 57 had booster doses.

The number of children adequately protected against this disease (i.e. have had a primary course or been boosted in the last 5 years) is now 1,666.

The majority of these primary injections also include immunisation against whooping cough in the pre-five year olds, and against tetanus at all ages.

POLIOMYELITIS.

The figures show those having had 2 injections of Salk vaccine, those having completed a course of three, and a selected age group of all school children thought to be at special risk between the ages of 6 and 12 years.

The total number of persons who have completed an immunisation course has risen from 1,561 in 1960 to 1,828 in 1961.

At the time of writing this report all booster doses of previous Salk courses and all new primary courses are with the oral Sabin vaccine.

This means that the pre-school and school population is about 90% protected and the figure for adults up to 40 years of age is about 35%.

B.C.G. TUBERCULOSIS.

Mantoux skin testing and B.C.G. vaccination was continued in 1961, the age group being those born in 1947. The table gives detailed figures.

Of 193 consents given (92% consent rate) all but 15 were tested and 50 (25%) were found to be positive reactors. The remaining 133 negatives were given B.C.G. vaccination. This figure of 25% for positive reactors is much the same as in previous years, although in most other areas of Cumberland the figure shows a steady fall over the past six years.

Of the five children with unsatisfactory chest X-rays, three had calcified primary complexes i.e. had had infection and overcome it naturally, one had collapse of part of a lung, and one had bronchiectasis.

POLIOMYELITIS VACCINATION.

Year of Birth	Pre	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	Total
													1946					

Age	over 15	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	under 1
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No. who have completed a primary course of 2 injections at 31/12/61	286	6	1	4	—	12	2	11	5	21	10	20	20	10	3	3	36	433
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No. who have completed a full course of 3 injections at 31/12/61	666	82	84	90	29	17	13	16	15	13	4	53	68	60	49	16	—
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No. who have completed a full course of 4 injections at 31/12/61	—	—	—	—	63	66	75	80	61	57	67	17	—	—	—	—	—
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MANTOUX TESTING AND B.C.G. VACCINATION.

Children born 1947.

Total children in 1947 age group	No. Mantoux Tested	Positive	Negative	No. given B.C.G. vaccination
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208	193	50	136	133
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No. of positive reactors referred to Chest Clinic for large film X-ray and found to be:

Satisfactory	Unsatisfactory	Did not attend	Already known cases.
36	5	3	13

DIPHTHERIA IMMUNISATION UNDERTAKEN DURING 1961.

Year of Birth	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	Total
Primary					1	1	3	8	8	5	3	7	14	49	47	146
Booster				1	2		2	4	9	24	3	4	2	6		57

INFECTIOUS DISEASES NOTIFICATION 1961.

Total Cases	Age Distribution.									Monthly Incidence of Disease												Deaths of Cases
	Under 1 year	1—2 years	3—4 years	5—9 years	10—14 years	15—24 years	25—44 years	45—64 years	over 65 years	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Scarlet Fever																						
Whooping Cough																						
Acute Poliomyelitis																						
Paralytic																						
Non-Paralytic																						
Measles 17		2	2	13							1	14	2									
Diphtheria																						
Acute Pneumonia																						
Dysentry 6	1	1		2	1			1									5			1		
Smallpox																						
Acute Encephalitis																						
Infective																						
Post-infectious																						
Enteric or Typhoid																						
Fever																						
Erysipelas																						
Meningococcal																						
Infection																						
Food Poisoning 2		1		1														2				
Puerperal Pyrexia																						
Ophthalmia																						
Neonatorum																						
Tuberculosis																						
Respiratory																						
Meninges																						
and C.N.S.																						
Other forms																						
Totals 25	1	3	3	16	1			1		1	1	14	2				2	5			1	

ANNUAL REPORT

OF THE PUBLIC HEALTH INSPECTOR AND SURVEYOR

J. J. PATTERSON, M.D., M.A., M.P.H., DIST. S. I. D.

FOR THE YEAR 1902

THE BOARD OF HEALTH AND NUTRITION

CITY OF CHICAGO, ILL., JANUARY 1, 1903.

TO THE BOARD OF HEALTH AND NUTRITION

AND TO THE BOARD OF SUPERVISORS OF THE CITY OF CHICAGO, ILL.

THE BOARD OF HEALTH AND NUTRITION, CHICAGO, ILL., HAS THE HONOR TO ACKNOWLEDGE THE RECEIPT OF THE ANNUAL REPORT OF THE PUBLIC HEALTH INSPECTOR AND SURVEYOR, J. J. PATTERSON, M.D., M.A., M.P.H., DIST. S. I. D., FOR THE YEAR 1902.

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329	330	331	332	333	334	335	336
337	338	339	340	341	342	343	344
345	346	347	348	349	350	351	352
353	354	355	356	357	358	359	360
361	362	363	364	365	366	367	368
369	370	371	372	373	374	375	376
377	378	379	380	381	382	383	384
385	386	387	388	389	390	391	392
393	394	395	396	397	398	399	400
401	402	403	404	405	406	407	408
409	410	411	412	413	414	415	416
417	418	419	420	421	422	423	424
425	426	427	428	429	430	431	432
433	434	435	436	437	438	439	440
441	442	443	444	445	446	447	448
449	450	451	452	453	454	455	456
457	458	459	460	461	462	463	464
465	466	467	468	469	470	471	472
473	474	475	476	477	478	479	480
481	482	483	484	485	486	487	488
489	490	491	492	493	494	495	496
497	498	499	500	501	502	503	504
505	506	507	508	509	510	511	512
513	514	515	516	517	518	519	520
521	522	523	524	525	526	527	528
529	530	531	532	533	534	535	536
537	538	539	540	541	542	543	544
545	546	547	548	549	550	551	552
553	554	555	556	557	558	559	560
561	562	563	564	565	566	567	568
569	570	571	572	573	574	575	576
577	578	579	580	581	582	583	584
585	586	587	588	589	590	591	592
593	594	595	596	597	598	599	600
601	602	603	604	605	606	607	608
609	610	611	612	613	614	615	616
617	618	619	620	621	622	623	624
625	626	627	628	629	630	631	632
633	634	635	636	637	638	639	640
641	642	643	644	645	646	647	648
649	650	651	652	653	654	655	656
657	658	659	660	661	662	663	664
665	666	667	668	669	670	671	672
673	674	675	676	677	678	679	680
681	682	683	684	685	686	687	688
689	690	691	692	693	694	695	696
697	698	699	700	701	702	703	704
705	706	707	708	709	710	711	712
713	714	715	716	717	718	719	720
721	722	723	724	725	726	727	728
729	730	731	732	733	734	735	736
737	738	739	740	741	742	743	744
745	746	747	748	749	750	751	752
753	754	755	756	757	758	759	760
761	762	763	764	765	766	767	768
769	770	771	772	773	774	775	776
777	778	779	780	781	782	783	784
785	786	787	788	789	790	791	792
793	794	795	796	797	798	799	800
801	802	803	804	805	806	807	808
809	810	811	812	813	814	815	816
817	818	819	820	821	822	823	824
825	826	827	828	829	830	831	832
833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848
849	850	851	852	853	854	855	856
857	858	859	860	861	862	863	864
865	866	867	868	869	870	871	872
873	874	875	876	877	878	879	880
881	882	883	884	885	886	887	888
889	890	891	892	893	894	895	896
897	898	899	900	901	902	903	904
905	906	907	908	909	910	911	912
913	914	915	916	917	918	919	920
921	922	923	924	925	926	927	928
929	930	931	932	933	934	935	936
937	938	939	940	941	942	943	944
945	946	947	948	949	950	951	952
953	954	955	956	957	958	959	960
961	962	963	964	965	966	967	968
969	970	971	972	973	974	975	976
977	978	979	980	981	982	983	984
985	986	987	988	989	990	991	992
993	994	995	996	997	998	999	1000

ANNUAL REPORT

OF THE PUBLIC HEALTH INSPECTOR AND SURVEYOR,

J. J. PATTISON, M.R.S.H., M.A.P.H.I., CERT.S.I.B.

For the Year 1961.

To the Chairman and Members of the
COCKERMOUTH URBAN DISTRICT COUNCIL.

Mr. Chairman and Gentlemen,

I have pleasure in submitting my fourth Annual Report to the Council, for the year 1961.

Time does not permit a lengthy or greatly detailed account of the activities of the year but much important work has been done in the spheres of housing, street lighting and sewerage, apart from normal day to day matters.

Finally I express my appreciation of the ready co-operation and encouragement given to me at all times by Dr. Patterson, the Clerk and his Staff, and the valuable assistance rendered by my part-time clerical assistant, Mrs. K. Nairn, and the Works Foreman, Mr. C. Wilson.

I am,

Your Obedient Servant,

J. J. PATTISON,

Public Health Inspector and Surveyor.

WATER SUPPLY

The method of obtaining water by bulk supply from the trunk main from Crummock continued as before, but the Council's water undertaking became the property of the West Cumberland Water Board on April 1st. The total amount abstracted during the year into the Moor reservoir was 95,318,000 gallons, equivalent to an average daily consumption per head of 45 gallons. This figure includes trade supplies which account for approximately 10% of the consumption. Treatment of the lake water continued as set out in the 1955 report. The Water Board and my department continued sampling for bacteriological analysis and received consistently good reports from the Cumberland Pathological Laboratory. The amount supplied to the high level areas of the town via the Sunscapes reservoir averaged 83,342 gallons per day which was 32% of the total consumption.

Only 5 properties in the area have private water supplies.

DRAINAGE AND SEWERAGE

The sewage disposal works continued to function satisfactorily but rebuilding of the retaining walls of the filters, which were showing signs of collapse, has had to be continued. Rebuilding and redraining of the sludge drying beds is also being carried out.

With the exception of 41 houses, which have private sewage disposal works, all properties in the district are connected to public sewers.

REFUSE REMOVAL

There is a weekly collection of refuse in all parts of the town. Trade refuse is also collected. Refuse is disposed of by controlled tipping at the Lorton Road refuse tip where, despite a shortage of covering materials at times, the refuse has been mostly kept covered.

FACTORIES ACTS, 1937 to 1959.

There are 44 factories registered in the area as follows :—

Business	Powered	Non-Powered
Engineering	2	
Shoe Manufacturing	2	
Clothing Manufacturing	1	
Baking	4	7
Joinery	5	
Joinery and Sawmilling	2	
Concrete Products	1	
Printing	3	
Gas Storage	1	
Tanning		1
Brewing	1	
Motor Vehicle Repairs	6	1
Agricultural Machinery Repairs	4	
Panel Beating	1	
Slaughterhouses		3
Building Sites	2	

The following table shows the position under the Factories Acts, 1937 to 1959, in this district at the end of 1961 :—

Premises (1)	Number on Register (2)	Inspections (3)	Number of Written notices (4)	Occupiers prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	12	17	2	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	30	19	3	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises).	2	20	—	—
Total	44	56	5	—

Particulars	Number of cases in which defects were found				Number of cases in which prosecutions were instituted
			Referred		
	Found	Remedied	To H.M. Inspector	By H.M. Inspector	
(1)	(2)	(3)	(4)	(5)	(6)
Want of cleanliness (S.1)	—	—	—	—	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4)	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7)					
(a) Insufficient	1	1	—	1	—
(b) Unsuitable or defective	2	2	—	—	—
(c) Not separate for sexes	—	—	—	—	—
Other offences against the Act (not including offences relating to Outwork)	2	2	—	—	—
Total	5	5	—	1	—

(NOTE.—Section 1 refers to cleanliness ; 2 to overcrowding ; 3 to temperature ; 4 to ventilation ; 6 to drainage of floors ; 7 to sanitary conveniences).

OFFENSIVE TRADES.

The firm of fellmongers continued to trade in the Urban area. The premises were found to be clean and well maintained during each of the 12 inspections made.

PREVENTION OF DAMAGE BY PESTS ACT, 1949.

162 visits were made and 30 premises were treated for rats and mice infestations. 3 of the properties were business premises. The techniques of the Ministry of Agriculture, Fisheries and Food were adopted and the poisons employed were zinc phosphide and Warfarin.

FOOD.

Apart from Slaughterhouses, 109 visits were made to various food premises. Sanitary accommodation was improved at 1 bake-house.

Inspection of foodstuffs resulted in the following foods being condemned as unfit for human consumption :—

- 1 — 1 lb. 13 oz. Can Apricots.
- 8½ lbs. Bacon.
- 32 — 12 oz. Packets Currents.
- 1 — 6 lb. Can Corned Beef.
- 3 — 7 oz. Cans Corned Beef.
- 1 — 10 lb. 15 oz. Can Cooked Ham.
- 2 — 11 lb. 1 oz. Cans Cooked Ham.
- 2 — 12 lb. 4 oz. Cans Cooked Ham.
- 1 — 14 lb. 2 oz. Can Cooked Ham.
- 1 — 14 lb. 8 oz. Can Cooked Ham.
- 1 — 4 lb. Can Chopped Pork.
- 3 — 6 oz. Cans Dairy Cream.
- 2 — 2 pint Cans Evaporated Milk.
- 9 — ¾ pint Cans Evaporated Milk.
- 1 — 1 lb. 13½ oz. Can Fruit Salad
- 1 — 1 lb. 4 oz. Can Grapefruit.
- 1 — 1 lb. 3 oz. Can Grapefruit.
- 2 — 1 lb. Cans Grapefruit.
- 2 — 10½ oz. Cans Grapefruit.
- 1 — 1 lb. 3 oz. Can Grapefruit Juice.
- 12½ lbs. Ham.
- 1 — 12 oz. Can Ham and Tongue.
- 1 — 3¾ oz. Can Norway Sild.
- 6 — 11 oz. Cans Oranges.
- 1 — 6 lb. Can Ox Tongue.
- 1 — 1 lb. 4 oz. Can Pineapple.
- 1 — 16 oz. Can Pineapple.
- 1 — 15 oz. Can Pineapple.
- 2 — 12 oz. Cans Pineapple.
- 13 — 1 lb. 13 oz. Cans Pears.
- 7 — 1 lb. Cans Pears.
- 1 — 8 oz. Can Pears.
- 1 — 1 lb. 14 oz. Can Peaches.
- 4 — 1 lb. 13 oz. Cans Peaches.
- 2 — 1 lb. 12 oz. Cans Peaches.

- 5 — 1 lb. Cans Peaches.
- 2 — 1 lb. 3 oz. Cans Peas.
- 1 — 15½ oz. Can Peas.
- 7 — 10½ oz. Cans Peas.
- 1 — 15 oz. Can Pork.
- 4 — 12 oz. Cans Pork.
- 1 — 1 lb. 4 oz. Can Plums.
- 14 — 12 oz. Packets Raisins.
- 9 — 8 oz. Packets Raisins.
- 10 — 15½ oz. Cans Rice Pudding.
- 1 — 15½ oz. Can Strawberries.
- 1 — 7½ oz. Can Strawberries.
- 1 — 7¾ oz. Can Salmon.
- 1 — 7½ oz. Can Salmon.
- 1 — 10 lb. Can Shoulder Ham.
- 1 — 6 oz. Can Tongues.
- 1 — 14 oz. Can Tomatoes.
- 3 — 8 oz. Cans Tomatoes.
- 1 — 6½ oz. Can Tomatoes.
- 2 — 15½ oz. Cans Vegetable Soup.

SLAUGHTERHOUSES.

There were three licensed slaughterhouses in the area. The premises are not ideal but reports made under the Slaughterhouses Act, 1958, together with the prescribed recommendations decided the future closure of two slaughterhouses. 472 visits were made for meat inspection purposes.

SUMMARY OF SLAUGHTERING, 1961.

	Bulls	Bullocks	Cows	Heifers	Calves	Sheep	Pigs
Total number inspected	—	112	0	141	—	1148	226
Total number killed	—	112	0	141	—	1148	226
a All diseases except tuberculosis							
(1) Whole carcasses condemned	—	—	—	—	—	2	1
(2) Part carcasses or organs condemned	—	20	—	52	—	46	0
(3) Percentage affected with diseases other than T.B.	—	17.86%	—	36.88%	—	4.18%	.44%
b Tuberculosis only							
(1) Whole carcasses condemned	—	—	—	—	—	—	—
(2) Part carcasses or organs condemned	—	—	—	—	—	—	1
(3) Percentage affected with T.B.	—	—	—	—	—	—	.44%

CAUSES OF CONDEMNATION.

BULLOCKS :	15	Cirrhosis of Livers.
	4	Abscesses of Livers.
	1	Abscesses of Lungs.
HEIFERS :	1	Abscesses of Lungs.
	1	Bruising of Leg.
	47	Cirrhosis of Livers.
	2	Abscesses of Livers.
	1	Abscesses of Lungs, Liver and Skirt.
SHEEP :	40	Strongylosis of Lungs.
	6	Cirrhosis of Livers.
	2	Carcases Unbled and Unset.
PIGS :	1	Tuberculosis of Head.
	1	Septicaemia.

4 Slaughtermen are licensed in the district.

o

HOUSING.

6 Houses were completed at The Green, Melbreak Avenue, during the year by the Council and 35 were erected by private owners. The building of 36 houses at Pinfold Close was commenced by the Council.

During the past 17 years 379 Council and 216 private houses have been built in the district.

A great deal of work was done to further slum clearance and representations of unfitness were made in regard to 27 houses in Derwent Street, resulting in a Clearance Area being declared in respect of which a Clearance Order was made.

In addition, a further 25 representations were made in respect of individual unfit houses, resulting in the Council deciding to make 25 Closing Orders.

5 houses in old Clearance Areas were demolished,

HOUSING APPENDIX.

STATISTICS.

- 1 Inspection of Dwellinghouses during the year :—
 - (1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health and Housing Acts) 229
 - (b) Number of inspections made for the purpose 331
 - (2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidation Regulations 1925 and 1932) 0
 - (b) Number of inspections made for the purpose 0
 - (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 52
 - (4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation. 62
2. Remedy of Defects during the year without service of formal Notices :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers 59
- 3 Action under Statutory Powers during the year :—
 - (a) Proceedings under Sections 9, 10 and 29 of the Housing Act, 1957 :—
 - (1) Number of dwelling-houses in respect of which notices were served requiring repairs 0
 - (2) Number of dwelling-houses which were rendered fit after service of formal notices :—
 - (a) By owners 0
 - (b) By Local Authority in default of owners 0
 - (b) Proceedings under Public Health Acts :—
 - (1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 0
 - (2) Number of dwelling-houses in which defects were remedied after service of formal notices :—
 - (a) By owners 0
 - (b) By Local Authority in default of owners 0

(c) Proceedings under Sections 16 and 23 of the Housing Act, 1957 :—	
(1) Number of dwelling-houses in respect of which Demolition Orders were made	0
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	0
(d) Proceedings under Section 18 of the Housing Act, 1957 :—	
(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	25
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined the tenement or room having been rendered fit	0

IMPROVEMENT GRANTS.

6 applications for Improvement Grants were received and 6 were approved. In 4 cases the works were completed and the Grants paid.

1 application for a Standard Grant was received and approved. 2 Grants were paid.

PUBLIC HEALTH INSPECTOR'S SUMMARY OF VISITS, NOTICES, ETC., 1961.

Complaints Received	156
Total Visits	1807
Informal Notices Served	62
Informal Notices complied with	59
Works Outstanding	3
Nature of Visit or Inspection :—	
Fair Stalls, etc.	68
Water Supply	48
Drainage	57
Stables and Piggeries	4
Offensive Trades	0
Fried Fish Shops	10
Common Lodging Houses	0
Houses-Let-in-Lodgings	0
Tents, Vans and Sheds	25
Factories Mechanical	39
Factories, Non-Mechanical	17
Workplaces	53
Outworkers	0
Bakehouses	8
Public Conveniences	6
Theatres and Places of Entertainment	1
Refuse Collection	6
Refuse Disposal	25

Rats and Mice	162
Smoke Observations	0
Schools	0
Shops	44
Miscellaneous Sanitary Visits	18
Lighting	87
Roads	58
Churches	0
Public Houses	8
Housing Sites—Council	47
Housing Sites—Private	190
Other Building Sites	102
Sewage Works	29
Fellmonger's Yard	12
Under Public Health Acts	
No. of Houses Inspected	111
Visits Paid to above Houses	162
Under Housing Acts	
No. of Houses Inspected	118
Visits paid to above Houses	169
Overcrowding	
No. of Houses Inspected	0
Visits Paid to above Houses	0
Verminous Premises	
No. of Houses Inspected	1
Visits Paid to above Houses	2
Disinfested	1
Miscellaneous Housing Visits	121
Inquiries in Cases of Infectious Diseases	3
Visits re Disinfection	0
Miscellaneous Infectious Disease Visits	57
Disinfected	0
Inspection of Meat :	
Visits to Slaughterhouses	472
Visits to Shops and Stalls	20
Visits to Other Premises	0
Visits to :	
Butchers	6
Fishmongers and Poulterers	4
Grocers	23
Greengrocers and Fruiterers	23
Cowsheds	0
Dairies and Milkshops	8
Ice-Cream Premises	5
Food Preparing Premises	8
Market Stalls	27
Restaurants	2
Street Vendors and Hawkers' Carts	6
Confectioners	6
Visits in connection with Sampling :	
Milk-Bacteriological	6
Ice-Cream	0
Water	3

BUILDING PLANS APPROVED — 1961.

- BEWSHER—Conversion of hotel into 2 shops, one house and 6 flats and erection of 11 lock-up garages, Grassmoor Hotel, Main Street.
- LORTON STREET METHODIST CHURCH TRUSTEES—Preliminary application for erection one pair houses on land south-east of church, Lorton Street Methodist Church, Lorton Street.
- J. TWINAME LTD.—Erection of 2 semi-detached bungalows, 4 detached bungalows and garages, 2 semi-detached houses and car ports, 1 detached house and car port and 3 detached houses and garages, Beech Lane.
- CAIN—Erection of Garage, "Arundel," Isel Road.
- EDMONDSON—Erection of Conservatory, 6, Cherry Lane.
- STUDHOLME—Addition to existing shop premises, 11, Melbreak Avenue.
- HARDIE—Erection of Garage, 59, Kirkgate.
- BEWLEY—Erection of new kitchen and bathroom on first floor, and conversion of kitchen and bathroom to store on ground floor, 13, Station Street.
- T. ARMSTRONG LTD.—Extension 3 bedroom house to 4 bedroom type, Site No. 14, Rose Lane Estate.
- LAWSON—Change of use from credit betting office to cash betting office, 60a, Main Street.
- DODGSON—Extension of existing preparation and storage room, 82, Main Street.
- HUDDART—Erection of Garage, Fairfield.
- DENHAM—Erection of bedroom over existing garage, 12, Park-side Avenue.
- SMALL—Change of use from credit betting office to cash betting office, 5, Castlegate.
- GATE—Erection of Garage, 28, Windmill Lane.
- RYDIARD—Outline planning permission for housing development, field 224, Victoria Road.
- RYDIARD—Outline planning permission for 3 bungalows or houses, field 179, Tweed Mill Lane.
- CUMBERLAND COUNTY COUNCIL—Use of land as site for Highways Depot, Sullart Street/New Street.
- SWINDLE—Erection of Conservatory and car port, 19, Rose Lane.
- MOSSOP—Erection of Garage, 23, Mayo Street.
- MILLERS LTD.—Extension of existing Arcon factory building, Derwent Mills.
- MILLERS LTD.—Erection of Heel Lacquering department building, Derwent Mills.
- MILLERS LTD.—Erection of Compressor House, Derwent Mills.
- MILLERS LTD.—Erection of Nissen Storage Hut, Derwent Mills.
- FOY—Change of use of credit betting office to cash betting office, 7, Market Street.
- JACKSON—Erection of Garage, Site No. 15, Slatefell Estate Garage Site.
- ATKINSON—Conversion of bedroom to bathroom and alterations to kitchen, 11, Henry Street.
- HOUGHTON—Erection of Conservatory, 37, Oaktree Crescent.

- T. ARMSTRONG LTD.—Erection of 2 semi-detached houses, plots Nod. 21/22, Rose Lane Estate.
- FLEMING—Installation of bathroom, W.C., and drainage, 4, Castlegate.
- CHESTER—Rebuilding of existing Garage, 3, Towers Lane.
- LORTON STREET METHODIST CHURCH TRUSTEES—Erection of Garage, 7, Fern Bank.
- HINE—Conversion of privy midden to W.C., 29, The Goat.
- BEWSHER—Submission of proposed shop front, Grassmoor Hotel.
- ANDREWS—Erection of Garage, "Thain Ville," Lorton Road.
- NICHOLSON—Erection of three bedroom dwelling-house, field 51, adjoining Grassmoor House, Lorton Road.
- WILSON—Erection of Bungalow and garage, Rose Lane.
- BEWLEY—Conversion of living room to kitchenette, and bathroom to shop and store premises, and provision of alternative kitchen and bathroom, 13, Station Street.
- WALKER—Installation of bathroom and pantry, and drainage and sewage disposal system, Oakhurst Lodge, Lamplugh Road.
- J. TWINAME LTD.—Bungalow and garage, site No. 90, Park Lane Estate.
- PARK—Private garage, South Villa, South Street.
- J. TWINAME LTD.—Permission to develop land for building purposes, field Nos. 119, 120, 121, 122, 126, 127 and 129, Brigham Road.
- ELIOT—Permission to develop land for housing purposes, part field O.S. No. 190.
- MELIAS LTD.—Conversion of 1st and 2nd floors into 2 flats, 36, Market Place.
- PERKINS—Erection of Garage, 5, Dalton Street.
- CUMBERLAND COUNTY COUNCIL—Erection of Police Officer's House, Rose Lane.
- ARMSTRONG—Alterations to cafe, Central Cafe, Main Street.
- MITCHELL'S AUCTION CO.—Conversion part premises into a Slaughter-house, Lorton Street.
- NORTH WESTERN ELECTRICITY BOARD—Conversion 2 rooms of first floor into a ladies hairdressing salon, Electricity Service Centre, Main Street.
- NORTHERN GAS BOARD—Installation new shop front and refitting premises as gas showroom, 68, Main Street.
- EWART-THOMAS—Installation of bathroom, 13, Rubby Banks Road.
- HARKNESS FARM SUPPLIES LTD.—Extension to provide further workshops and canopy over petrol pumps, Goat Filling Station.
- PEACEY—Erection of Garage, 12, Brigham Road.
- JOHNSTON—Enlargement of rear of house to provide kitchen/scullery and provision of bathroom, 79, St. Helen's Street.
- BELL—Erection of 6 private garages, land behind "Ashgrove," Lorton Street.
- QUAIL—Addition of adjoining premises to existing shop and frontal improvements to shoe retailing shop, Cocker Bridge.
- CHRIST CHURCH PAROCHIAL CHURCH COUNCIL—Alterations to existing kitchen building, Christ Church Rooms, South Street.

NORTH WESTERN ELECTRICITY BOARD—Alterations to W.C.s and provision of messroom and works depot in existing building, Electricity Service Centre and Depot, Main Street.

T. ARMSTRONG LTD.—Erection of 2 bedroom detached bungalow, Brigham Road.

PARKIN—Extension of Byre, Greenbank Farm.

J. TWINAME LTD.—Erection of 5 detached houses and garages, 2 semi-detached houses and car ports and 1 detached bungalow and garage, Beech Lane, and 2 detached bungalows and car ports, Cedar Lane.

JOHNSTON—Erection of Garage, 43, Henry Street.

STEWARDSON—Erection of Garage, 80, Windmill Lane.

SEALBY BROS.—Improvements to existing Slaughterhouse, Tweedmill Lane.

IRVING—Erection of Garage, 60, Slatefell Drive.

NICHOLSON—Detached three bedroom dwelling-house, field adjoining Grassmoor House.

CUMBERLAND COUNTY COUNCIL—Use of field as playing field for primary schools, field No. 152, Mountain View.

W. S. NICHOLSON & SON—Erection of general purpose agricultural building, Grassmoor House, Lorton Road.

CAINE—Erection of Garage, 6, Woodside Avenue.

FARLEY—Erection of Garage, 11, Lingfell Avenue.

WHALLEY—Erection of Garage, 12, Woodside Avenue.

POTTS—Installation of bathroom in existing room and provision of drainage work, 4, Challoner Street.



THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY
CHICAGO, ILLINOIS 60637
U.S.A.
1968
1. The first part of the report describes the experimental work carried out during the summer of 1968. The results of the experiments are presented in the form of tables and graphs. The second part of the report discusses the results of the experiments and compares them with the results of previous experiments. The third part of the report discusses the theoretical aspects of the problem and presents a model for the reaction. The fourth part of the report discusses the conclusions of the work and suggests directions for future work.

