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#### **Contributors**

Tyne Port Health Authority.

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1954

Tyne Port Health Authority

# ANNUAL REPORT

OF THE

Medical Officer of Health



# 1954

Tyne Port Health Authority

# ANNUAL REPORT

OF THE

Medical Officer of Health

SOUTH SHIELDS

R. SIMPSON & SONS, CHAPTER ROW.

1955.

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#### Tyne Port Health Authority

CONSTITUTED BY LOCAL GOVERNMENT BOARD'S ORDER,
Dated 29th March, 1897.

ELECTED BY THE CORPORATION OF NEWCASTLE:

ALDERMAN J. W. TELFORD.

Councillor R. A. DIXON

COUNCILLOR R. M. HENDERSON, J.P.

COUNCILLOR J. McCAMBRIDGE.

COUNCILLOR D. A. R. MILLIGAN.

COUNCILLOR G. ROBSON.

COUNCILLOR M. SHAW.

COUNCILLOR E. B. TEMPLE.

ELECTED BY THE CORPORATION OF GATESHEAD:

ALDERMAN W. F. BARRON, J.P.

ALDERMAN B. N. YOUNG.

ALDERMAN J. T. ETHERINGTON.

ELECTED BY THE CORPORATION OF SOUTH SHIELDS:

COUNCILLOR C. BARRASS, J.P.

COUNCILLOR G. GIBSON.

COUNCILLOR E. W. MACKLEY, J.P.

ELECTED BY THE CORPORATION OF TYNEMOUTH:

COUNCILLOR W. LITTLE.

COUNCILLOR A. SOUTHWORTH.

ELECTED BY THE CORPORATION OF WALLSEND:

COUNCILLOR C. L. PALMER (Chairman).

ALDERMAN P. J. MCARDLE, J.P.

ELECTED BY THE CORPORATION OF JARROW:

ALDERMAN P. SCULLION.

ELECTED BY THE HEBBURN URBAN DISTRICT COUNCIL:

COUNCILLOR E. FRENCH, J.P.

ELECTED BY THE FELLING URBAN DISTRICT COUNCIL:

COUNCILLOR T. P. S. PRUDHAM.

ELECTED BY THE BLAYDON URBAN DISTRICT COUNCIL:

COUNCILLOR J. T. STEPHENSON (Vice-Chairman).

ELECTED BY THE NEWBURN URBAN DISTRICT COUNCIL:

COUNCILLOR E. DOWLING, J.P.

ELECTED BY THE WHICKHAM URBAN DISTRICT COUNCIL:

COUNCILLOR E. RUTHERFORD.

The above Constitution is as existing on the 31st December, 1954.

# SECTION I-STAFF

# TABLE A

Any other Appointments held.	Medical Inspector of Aliens.	Deputy Medical Inspector of Aliens.						
Qualifications.	M.D., B.S., B.Hy., D.P.H.	M.B., B.S.	Cert. R.S.L.	Cert R.S.I. Cert Meat and other foods.	Cert R.S.I.	Cert R.S.I. Cert R.S.A.S.	toron tioned the about 1193	
Date of Appointment.	1st Jan., 1937	*lst Jan., 1950	12th Sept., 1920	30th May, 1933	6th Feb., 1933	16th Jan., 1952 1st Oct., 1953	8th August, 1927.	9th Feb., 1925. 4th March, 1935. 31st Dec., 1951. 15th May, 1922, 14th April, 1939. 27th Nov., 1950. 28th Sept., 1953.
Nature of Appointment.	Medical Officer of Health	Deputy Medical Officer of Health	Clerk to the Authority.  Treasurer. Chief Port Health Inspector	Food Inspector, Deputy Chief Port Health Inspector	Port Health Inspector	Port Health Inspector Port Health Inspector	Clerk	Rat Searcher Rat Searcher Rat Searcher Launch Coxswain Launch Goxswain Launch Hand Launch Hand
Name of Officer.	T. L. J. Coxon	J. О'Сальавнам	J. English J. Goodwood Raine N. Park	R. O. Burn	W. B. Weatherston	W. G. L. Drcks R. R. Bain	E. M. GLENNY (Miss)	J. H. Robinson H. Burn R. Humphrey J. W. Ray R. S. Burn K. Jarvis L. Humphrey

\*Re-appointed after War Service.

OFFICES OF THE AUTHORITY.

Clerk to the Authority-145 Pilgrim Street, Newcastle upon Tyne 1, Tel. Newcastle 22796. Medical Officer of Health-Mill Dam, South Shields, Tel. South Shields 65. Chief Inspector-Mill Dam, South Shields, Tel. South Shields 65.

#### Tyne Port Health Authority

MILL DAM, SOUTH SHIELDS,

April, 1955.

THE CHAIRMAN,
VICE-CHAIRMAN and MEMBERS of the
Tyne Port Health Authority.

Ladies and Gentlemen.

In submitting, for your consideration, the Annual Report on the state and trade of the Port of Tyne, it is necessary to emphasise that as much of the information has already appeared in previous reports a certain amount of curtailing is inevitable.

Movements of shipping have shown little difference from 1953; the total tonnage remaining practically the same.

Sickness on board both coastwise and foreign has been light, though towards the end of the year, the presence of smallpox in Brittany has meant very careful examination of the crews of all ships which have called there or have members of crews domiciled in or around the area.

True imports and exports (both excluding coastwise traffic) are roughly balancing each other.

A valued member of the Inspectorial Staff, Mr. H. M. Coats, retired after a long illness. He was in his 64th year, and had served the Authority for 45 years.

It is again with pleasure that I place on record, the splendid co-operative spirit shown in the relations between this Authority and H.M. Customs & Excise and H.M. Immigration Service in all aspects of their work common to each Service. I am grateful to both Services for their help and consideration.

With the Tyne Improvement Commission and the Tyne Pilotage Authority our relations remain cordial.

Your own Staff have worked well throughout the year.

Finally, on behalf of the Clerk to the Authority, your Staff and myself, I wish to thank all Members of the Authority for their interest and sympathetic attitude towards our labours through the year.

I am, Ladies and Gentlemen,

Your Obedient Servant,

T. L. J. COXON.

#### TYNE PORT HEALTH AUTHORITY

Report of the Medical Officer of Health for the Year ended 31st December, 1954.

# SECTION II—AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR 1954.

#### TABLE B.

Ships from	Number	Tonnage -	Numbe	Number of ships reported as having, or	
	Number	Tonnage -	By the Medical Officer of Health.	By the Sanitary Inspectors.	having had during the voyage, infec- tious disease on board.
Foreign Ports	1,539	2,874,561	671	1,465	7
Coast- wise	4,793	5,279,988	59	4,039	5
Total	* 6,332	8,154,549	730	5,504	12

<sup>\*</sup> These totals do not include Fishing Vessels.

Total number of vessels visited by Inspectors :-

Brit	rsh	SI	reg	08.
------	-----	----	-----	-----

Steam	2,333	
Motor	1,385	
Sail		
Fishing	213	
		3,931
Foreign Ships.		
Steam	965	
Motor	821	
Sail	9444	
Fishing	77	
		1,863
Re-visits		929

6,723

83,393

Total number of crews of vessels visited by Inspectors :-

#### British Ships.

British White	73,978
British Coloured	7,268
Alien White	854
Alien Coloured	1,293
	Streetween 1

Foreign Ships.  British White	762 254 53,779 210	55,005	138,398
British White		2,248	
Foreign Fishing Vess Alien White		1,589	
			3,837
Total number of passengers of British Ships.	vessels vis	ited by Insp	ectors :—
British	174		
Alien	89	200	
Foreign Ships.		263	
British	28,468 23,754	52,222	52,485
Fishing Vessels.			
British			
Connage of vessels visited by Ins	spectors :-		
Steamers.	1		
British	3,308,524 1,627,068	4,935,592	
Mataus		2,000,002	
Metors. British	1 961 600		
	1,861,098		
Foreign	1,026,659	2,887,757	

S	ailing Vessels.			
	tish	Nil.		
		377		
FOI	eign	Nil	Nil.	
				7,823,349
			111111111111111111111111111111111111111	-,020,010
Fis	hing Vessels.			
Bri	tish		16,781	
For	eign		9,911	
	7-6			26,692
			-	-
The N	Nationalities of	vessels inspected were a	s follows :	
	British			3,718
	Argentinian			2
	Belgian			
	Dutch			339
	new a			****
				100
				_
	Honduranian Icelandic	***************************************		_
	Irish			1
	T 11			2
	Tr 1:			10
	T (1)			-
	Liberian			10
4	35 .			1
	37 .			358
	Panamanian			42
	Polish			
	Portugese			2 3 3 7
				3
	South African			3
				7
	Swiss			2
	Turkish	A		9
	United States			1
	Uraquay			1
		Total		5,504
		1000		0,004

The National	lities of Fishing Vessels visited were as follow	s :
Britisl	h	213
Belgia	n	1
Dutch		5
French		46
Germa	an	23
Polish		1
Swedi	sh	1
		290
	religion was a superior story to maintain the	
The number	of Re-visits made during the year were as follo	ows :
	atting Exemption Certificates	541
	nection with health	56
	er to have defects remedied	332
In con	nnection with food	
		929
	table of the second sec	020
	of vessels inspected during each year for the has been as follows:—	ne last
1945	Vessels 3,359	
	Fishing Vessels 5 Re-visits 842	
		4,206
1946	Vessels 4,269	
	Fishing Vessels Re-visits 942	
		5,211
1947	Vessels	
1011	Fishing Vessels 65	
	Re-visits 820	
	The state of the s	5,593
1948	Vessels 5,044	
	Fishing Vessels 338	
	Re-visits 815	6,197
1949	Vessels 5,601	0,101
7,10	Fishing Vessels 150	
	Re-visits 772	
		6,523

1950	Vessels	5,561	
	Fishing Vessels		
	Re-visits	767	
			6,416
1951	Vessels	5,281	
	Fishing Vessels	51	
	Re-visits	787	
			6,119
1952	Vessels	5,807	
	Fishing Vessels	80	
	Re-visits	957	
	-		6,844
1953	Vessels	5,410	
	Fishing Vessels		
	Re-visits	744	
			6,216
1954	Vessels	5,504	
	Fishing Vessels	290	
	Re-visits	929	
			6,723

# SECTION III—CHARACTER OF SHIPPING AND TRADE DURING THE YEAR.

#### TABLE C. Passenger Traffic.

Number of passengers INWARDS	53,854
Number of passengers OUTWARDS	55,275
CARGO TRAFFIC.	
Total tonnage entering the port during the past nine ye	ears has
been as follows :—	

Tonows	-		
1946.	Foreign	1,659,445	
	Coastwise		
			5,230,344
1947.	Foreign	1,575,042	
	Coastwise		
			5,500,550
1948.	Foreign	1,752,855	
	Coastwise		
			6,040,098
1949.	Foreign	2,304,073	
	Coastwise		
			7,304,319
1950.	Foreign	2,297,988	.,,
	Coastwise		
			7,677,127
1951.	Foreign	2,363,725	
77777	Coastwise	5,387,212	
			7,750,937
1952.	Foreign	2,577,003	.,,,
	Coastwise	5,532,957	
	00000		8,109,960
1953.	Foreign	2,582,323	0,100,000
2000.	Coastwise	5,583,724	
			8,166,047
1954.	Foreign	2,874,561	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Coastwise	5,279,988	
	000000000000000000000000000000000000000		8,154,549
			and the second second second

Through the courtesy of the General Manager of the Tyne Improvement Commission, I am able to give the following report on the import and export trade of the Tyne Ports.

Principal Imports	Tons.
Iron Ore	1,081,051
Oil Fuel and other oils	669,372
Grain	243,083
Timber (excluding Pit Props)	162,761
Cement	158,288
Pit Props	142,264
Provisions	134,133
Petroleum Spirit	60,904
Metals and Minerals (excluding Iron Ore)	59,702
Fruit and Vegetables (Fresh)	27,330
Fish	27.057

			Tons
F	ertilisers		25,328
Ir	on and Steel Scrap		
	, ,, ,, Manufa	ctures	10.00*
The state of the s			
0	ther Goods		00 -00
	Total .		2,923,963
Principal Exports	:		m.
es.	ulphoto of Ammonia		Tons.
	ulphate of Ammonia il fuel cargo		
	achinery		
	on and Steel Manufa		
	irebricks and Firecla		
		У	0.000
	rain and Feeding Stu		
	[etals (non-ferrous)		
	ope and Binder Twin		
	Total .		441,654
0	il Fuel shipped as Bu	unkers	223,491
Exports of Co	al and Coke :-		
			7 000 000
C	oke Cargo		641,437
			8,250,663
Co	oal Bunkers		222,793
	Total Cargo and b	ounkers	8,473,456
Shipments to :-	of Course and		
	Coastwise Ports.	Foreign Ports.	TOTAL
	Tons.	Tons.	Tons.
Coal Cargo	6,125,278	1,483,948	7,609,226
Coke Cargo	8,143	633,294	641,437
Coal Bunkers	116,688	106,105	222,793
Totals	6,250,109	2,223,347	8,473,456

Principal Ports from which ships arrive.

Normal Tyne trading includes a large proportion of traders from Canadian, Norwegian, Swedish, Danish, Dutch and German Baltic Ports, also a few arrivals from Poland, Russia and Finland.

Oil and petrol from various ports; iron ore from West African ports, a few from Spain, and general cargoes from America make up the bulk of the rest of the total of general trade.

#### SECTION IV-INLAND BARGE TRAFFIC.

There are no canals in the area and no barges operating in the port.

#### SECTION V-WATER SUPPLY.

- 1. No change.
- 2. No change.
- 3. No change.
- 4. There are now eight water boats available for the supply of fresh water to vessels at Tyne Ports'. The following is a list of vessels and owners:—

Name of Water Boat. Name of Owners. "Crystal Stream" Messrs. R. G. Aitken & Co. " Harcus " V. A. Curry. "West Riding" "Royal Sovereign" Fenn Bros. 22 " Britannia" A. Gibson. "Crystal Fountain" 22 S. Pascoe & Co. "I'll Try " "Thomas & Alice"

#### SECTION VI—PUBLIC HEALTH (SHIPS) REGULATIONS, 1952.

No Change.

#### SECTION VII.—SMALLPOX.

 Name of Isolation Hospital to which smallpox cases are sent from the district.

The Regional Hospitals Area Board have designated Langley Park Isolation Hospital, Co. Durham. (2) Arrangements for transport of such cases to that hospital by ambulance, giving the name of the Authority responsible for the ambulance and the vaccinal state of the ambulance crews.

The Authority possess no road ambulance of its own, and is dependent on the co-operation of shore authorities for ambulance facilities of all types.

(3) Name(s) of smallpox consultant(s) available.

The panel of Consultants available is in accordance with those of the Ministry's designated list for Northumberland and Durham.

(4) Facilities for laboratory diagnosis of smallpox.

Diagnostic specimens are forwarded to Virus Reference Laboratory Colindale Avenue, London, N.W.9.

#### SECTION VIII.—VENEREAL DISEASE.

No change.

#### SECTION IX—CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES ON SHIPS.

#### TABLE D.

Category.	Disease.	Numb cases of the	Number of ships concerned.	
	ASSIAULE TO	Pass- engers.	Crew.	concerned.
Cases landed from ships from foreign ports	Chicken Pox Rerurrent Malaria Rubella Scarlet Fever	1 1	1 1 1	1 1 1 2
Cases which have occurred on ships from foreign ports but have been disposed of before arrival.	Bronchial Pneumonia Suspected Tuberculosis		1	1
Cases landed from other ships.	Dysentery Suspected Dysentery Enteric Pneumonia Rubella		1 1 1 1 1	1 1 1 1 1

#### CHICKEN POX.

				-		
1954	Name of Vessel	From	On voyage	On or after arrival	Remarks	Notes on arrival at Tyne
May 17	m.s. "Nuolja"	Narvik		1		Moor Park Hospital.
		DYSENTERY.				12.
May 1	m.s. "Egero"	DYSENTERY. Singapore, Mena al Ahmadi, Liverpool		1		Removed to Hosp.
	SI	USPECTED DYSENTE	RY.	1		
Oct. 27	m.s. "Cressington Court".	Buenos Aires, Rosario and Manchester	1		Left at M'ch'tr.	All well.
		ENTERIC.	_			
Nov. 17	m.s. "Port Wellington"	Tasmania, Timaru, Port Chalmers and London	1		Left at London.	All well.
	1	RECURRENT MALARI	A.	-		
June 10	s.s. "Helga Achroder".	Kristianstad		1		Exam. by M.O.H.
		PNEUMONIA.	-	-		-
Dec. 17	s.s. "Hektor"	Lulea and Middles- brough.	1		Left at M'boro.	All well.
		BRONCHIAL PNEUM	ONIA			
Jan. 4	s.s. "Hampshire Coast".	Hull and Hamburg.	1		Died at Hull	All well.

#### RUBELLA.

1953	Name of Vessel	From	On voyage	On or after arrival	Remarks	Notes on arrival at Tyne
Jan 29 April 21	m.s. "Braemar" m.s. "Freda"	Oslo		1 1 2		Exam. by M.O.H. Exam. by M.O.H.
		SCARLET FEVER.				
April 19 Aug. 17	m.s. "Blenheim" s.s. "Mathilda"	Oslo  Bergen & Archangel	4	1 1 2		Exam. by M.O.H. Dean's Hospital, S. Shields.
	sus	PECTED TUBERCUL	osis.			
Mar. 20	m.s. "British Fidelity".	Wellington, Panama, and New Orleans.	1		Left at Bilbao.	All well.

by Masters of Vessels as having occurred during. Health Officials in each month of the year 1954. GENERAL SICKNESS ON BOARD VESSELS ARRIVING AT TYNE PORTS DURING THE YEAR 1954. in each month of the year 1954. Diseases of Intestines 101 GN Diseases of Heart CH Diseases of Glands Diseases of Eye Diseases of Chest Diseases of Bladder Біатгроев Blood Pressure 01 Blood Poisoning Asthma & Bronchitis 01 00 01 CI Appendicitis 01 10 Abscesses, The subjoined table gives a return of sickness\* reported the voyage, or coming under the notice of the Tyne Port 01 125 42 15 00 Accidents Suspected 52 Scarlet Fever 01 Rubella Bronchial Pacumonia Pneumonia Recurrent Enteric Dysentery Suspected Dysentery \* \* Сріскей Рох TOTALS 1954. September November December February January October August March April June May July

-9 16 13 53 TOTALS. 01 00 2 Venereal Scables 27 General Sickness on Board Vessels Arriving at Tyne Ports.—continued. Peritonitis 1-01 benfieb-noN 01 10 Nervous Disorders 7 7 Suspected 00 Lumbago 01 Jaundice 01 00 Influenza Gastric Enteritus Fibrositis 10 Febrile Catarrh Epilepsy Diabetes Diseases of Tissue 9 01 Diseases of Throat 9 Discases of Teeth and Gums 01 GI Diseases of Stomach 01 9 Diseases of Skin Diseases of Mervous 01 21 Diseases of Lungs Diseases of Kidneys 01 TOTAL 1954 September November December February October January August March April June July May

The names of the diseases during the voyage are given as reported by the Master of the vessels.
\*Removed to Isolation Hospitals.

#### VESSELS ARRIVING FROM INFECTED OR SUSPECTED PORTS.

Vessels arriving at Tyne from Infected Ports were boarded by Medical Officer and Inspectors of the Tyne Port Health Authority, as under :-

Name of Port.	Direct to the Tyne.	To the Tyne Indirect
Aden *		4
Alexandria †		1
Algiers †	1	
Bombay *		1
Bone *	1	2
Calcutta #		7
Dakar *	-	7
Danzig *	1	1
Gdynia * Istanbul †		1
Karachi *		0
Suor *		5
Their all	7	5
Tripon	4000	-
Totals	3	33

\*Smallpox.

†Typhus.

‡Cholera.

#### SECTION X.—OBSERVATIONS ON THE OCCURRENCE OF MALARIA IN SHIPS.

Malaria has shown a notable decrease on board vessels arriving from West Africa. In general, anti-malarial measures are well applied, but to account for the great diminution in reported cases, it would appear that opportunities for infection on the African Littoral are more limited than heretofore.

# SECTION XI.—MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE.

No ships were subjected to special measures in respect to suspicion of plague, with the exception that any vessel arriving from suspected ports were not granted full pratique until the crew had been examined by the Medical Officer.

#### SECTION XII.—MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS.

1. Ship board rats are becoming increasingly scarce, and the old rat infested ship is becoming a rarity. Should there be any report of unusual numbers of rats or unusual behaviour among them, steps are taken to examine the vessel carrying them.

All runways, traces, tracks and possible harbourage are noted, and an estimate of the number of rats is formed.

The degree of rat proofing is noted and the ship's cubic capacity is measured compartment by compartment.

On the result of this examination, carried out by two experienced officers and searchers, appropriate treatment is decided, whether by poisoning, trapping or fumigation.

Similar procedure is adopted on examination for the purpose of deratisation or exemption certification when however, it is insisted that the vessel be empty of all cargo.

- 2. All rats recovered are examined for type, presence of swollen glands and undue emaciation before destruction by incineration. Any abnormal rats are further examined, and if regarded as necessary, are subjected to bacterial examination.
- 3. The deratting of ships is carried out by private contract between the agents and fumigators on the approved list of the Port. This contains the names of eight firms operating in the area. All are cyanide fumigators, and up to date, no fumigation with chemicals other than cyanide have been requested.

Messrs. Associated Fumigators Ltd.

- , Barber & Heron Ltd.
- , London Fumigation Co. Ltd.
- .. W. I. Martin.
- ., A. Milburn & Co.
- " Fumigation Services Ltd.
- " J. McGurk.
- .. James Cuthbertson & Co. Ltd.

Trapping, and a certain amount of pre-baiting is practised in certain circumstances where fumigation is unsuitable, and this is performed by a professional rateatcher.

4. Rat proofing is now a major consideration with Naval Architects in the construction of new tonnage, and in older vessels the substitution of expanded metal and sheating for wooden conduits and casings is proceeding with successive surveys.

TABLE E.

Rodents destroyed during the year in ships from foreign ports.

Category	Number
Black rats	99
Brown rats	36
Species not known	Nil.
Sent for examination	Nil.
Infected with plague	Nil.

#### SECTION XII.—SURVEY OF PROGRESS IN DERATTING OF FOREIGN GOING VESSELS.

#### 1920-1954.

The presence of rats on board ships has for centuries been a foregone conclusion, and their ravages on stores and cargo were accepted with the same philosophy which allowed the universal presence of cockroaches, weevils, lice and bugs to pass almost unnoticed.

Certainly when it was discovered that rats and plague were associated, certain measures to restrict their free passage from ship to shore were devised and put into operation. Poison was employed in increasing quantities and devices such as berthing a few feet from the quayside, whitening gangways, tarring ropes, and placing of disc rat guards on hawsers were in common use,

These were, however, palliative and not strictly preventative, nor markedly effective in achieving their object.

Whilst so little attention was directed to shore installations, and quays were of wooden construction, and the supporting piles were sodden wooden baulks, it was inevitable that rat harbourage should abound. When to this are also added, isolation, rubbish dumps, bad lighting and sewage outfalls, ideal conditions are produced for the fruitful multiplication of the rat population.

Similar, though more confined conditions (if for quays etc., we substitute wooden sheathing and bilge spaces) as exist on shore, were also present on board ship.

Constant exchange occurred at every port of certain elements of the rat infestation, and in time the local or regional physical characteristics of the rat tended to be lost, and merged into a more universal type. No longer can it be adduced that so many brown rats or black rats have been destroyed. Their descendants are approximating to an intermediate type.

In any case, it has never been satisfactorily proved that a plague infected flea shows any preference for a black or a brown rat.

The first serious attempt to reduce the sea-borne rat population followed the introduction of sulphur dioxide as a fumigant. Methods of pumping the gas into holds and accommodation by such apparatus as the Clayton Fumigator, or the burning of rock sulphur in suitable buckets in sealed compartments, were employed with considerable success.

International interest in rat eradication culminated in the findings of the International Sanitary Convention of Paris in 1927. Following this, a form of universal certificate stating what means had been undertaken to render deep sea vessels rat free was introduced.

Prior to this, the United States of America had shown a great pioneering spirit by requiring a system of certificates stating that vessels bound for the States had been subjected to suitable deratisation. This certificate, they required to be viséd by their Consuls abroad.

On general ratification of the Paris Agreement, this of course no longer pertained, but the principle remained with the Port Medical Officers' signature replacing that of the Consul.

Every foreign going vessel of whatever nationality, must now submit to examination every six months, and carry a certificate either of fumigation, or exemption from fumigation if the examination so warranted.

So successful has this regulation proved, that the principle of examination and the legal requirement of carrying a valid

certificate that the vessel is rat free, has now been extended to coastal trade as well.

Improvement in the methods of fumigation have also been effected, and newer and more lethal fumigants than the original S.O.2 are now employed.

H.C.N. first used in this port around 1924, has, in the intervening 30 years firmly established itself against all competition as the most reliable and successful of fumigants. The ease of its application, lightness of apparatus, and thoroughness of results have greatly outweighed the risk of life endangered in some cases by careless handling.

Fatalities, when they occur, are rarely the result of operational carelessness, but more frequently are attributable to the determined efforts on the part of members of crews to return illicitly and secretly to their accommodation, forgetting that their ship is under gas. A few determined suicides have also been noted.

To tighten up measures to ensure against such accidental deaths, and to ensure that fumigating firms attained and maintained a high degree of skill, training, and care in the performance of this work, the Cyanide (Ship) Regulations were made in 1952, and have been in force since that date.

The results achieved by fumigation when practised on a large scale, and on an international basis, have been remarkable, and much of the progress denoted in the following extracts from past annual reports lies to its credit, though the improvements in ship construction, elimination of harbourage, the use of expanded metal for wood, in casings and linings on ships, and the provision of food lockers and better accommodation generally, have played their part.

- 1929. 2,185 rats destroyed on 30 vessels. Trapping and baiting-S.O.2 used in certain cases.
- 1924. 5,492 rats destroyed on 129 vessels. 10 fumigations, S.O.2 (burning sulphur) and 10 Form Port 10 vised by American Consul.
- 1927. 3,331 rats destroyed on 79 vessels. 37 Form Port 10 issued.
- 1928. 2,628 rats destroyed on 69 vessels. Deratisation certificates issued 44. S.O.2, in 26, Exemptions 20.
- 1930. 3,407 rats destroyed on 563 vessels. Deratisation certificates issued 190 H.C.N. in 23, Exemptions 373.
- 4,839 rats destroyed on 643 vessels. Deratisation certificates issued 313. H.C.N. in 33, Exemption 330.
- 1939. 923 rats destroyed on 507 vessels. Deratisation certificates issued 76, Exemption 431.

- 1940. 1,211 rats destroyed on 362 vessels. Deratisation certificates issued 64, Exemption 298.
- 1953. 161 rats destroyed on 26 vessels. Deratisation certificates issued 26, Exemptions 333.

It will be seen that in the period under review, a steep increase in the number of fumigations occurred, reaching a peak in 1930—34, when the proportion of fumigations to exemptions rose to 2 in 3. Subsequently, as steep a decline took place, until in 1951, the proportion was 1 in 10, and it is now rare to find a ship with a rat population exceeding a dozen.

Trapping and baiting still has its uses in minimal infestations.

The introduction recently of sodium flouroacetate as a bait poison has provided us with a powerful addition to the agents already in use against rodents, and so effective is it, that claim for the issue of Deratisation Certificates after its application, have been put forward. As a bait, it is deadly to rats, but it is deadly to all animals, and it must be handled with gloves, and if accidently spilt even in the weak concentrations in use, must be most carefully removed. It is stated to be quick in action.

Its claims as being superior to H.C.N. are not, in my opinion, fully maintained.

The saving of time and money is advanced in its favour, but the presumption of a 100% kill cannot be made as surely as with H.C.N. consequently the value of the certificate is in doubt.

There has been a tendency in recent years, in respect of shipping generally, towards specialisation in the new tonnage under construction.

Tankers, always a specialist design, have increased from 6,000 tons to five times that tonnage, and are now becoming a problem for the dry docking companies when it comes to the question of hull repairs and general overhaul. The number of dry docks in the country capable of taking a 32,000 ton tanker, is strictly limited.

Advance in refrigeration for meat, fruit, and fish, has led to the development of another kind of fast, fully refrigerated vessels of medium tonnage, and vessels primarily designed for the transport of metal ore are on the increase.

This trend had led to great diminution in the new tonnage of the ubiquitous "tramp" of olden times, and the general purpose vessel of this type is tending to die out. The present emphasis being on speed of travel, ease of loading, discharge and quick turn round, has placed the general cargo vessel at a disadvantage and made it generally a less profitable proposition. though the develop-

ment of tiny motor coasters now as a family concern, has been most marked. These small craft, economical ro run, light in tonnage, and therefore light in dues and incidental expenses, carry a percentage weight of cargo greatly in excess of vessels previously engaged.

Streamlining and specialised design have been applied to colliers with great effect, and many colliers permit comfort and working conditions on board equal to any vessel afloat.

All these modern trends in design have not lost sight of the importance of reducing possible rat harbourage.

The docks, wharves and quays in general, are showing great improvement, and by more modern methods of building and designing, and the replacement by ferro-concrete of wooden piles and staging, are assisting to eliminate many of the favourite haunts and breeding places of the riparian rat population.

The inevitable presence of waste or unused land along the river side, together with the penetration of the area by innumerable sewage outfalls, make the question of rat extermination on shore, one of some difficulty.

Limited available staff on the part of public authorities, the comparative isolation of many wharves and docks, and the private nature of the ship-building and repairing yards increase the difficulty in the way of efficient co-operation whereby a wholesale onslaught could be undertaken.

Deratting Certificates and Deratting Exemption Certificates issued during the year for phips from foreign ports. TABLE F.

Total	Certificates	T 2	358
Number of	Exemption	Issued.	349
	Total	100m.	6
	After	Poisoning 4	NIL.
TES ISSUED.	After	a apping.	NIL.
No. of Deratting Certificates Issued.	After fumigation with.	Other fumigant (State Method).	NIL.
		H.C.N.	6

+State poisons used and number of Certificates issued after each poison.

# SECTION XIII—INSPECTION OF SHIPS FOR NUISANCES.

TABLE G.

INSPECTIONS AND NOTICES.

Notices and secondary of	NOTICES SERVED.	SERVED.	Donald of Committee Notice
Inspections .	Statutory Notices.	Other Notices.	Nesure of Serving Notices.
Original 5,504	NIL.	192	190 Complied with.
Revisits 929			
TOTAL 6,433	NIL.	192	190 Complied with.

Nationality of Vessels.	Number inspected during the year.	Defects of original construction.	Structional defects through wear and tear.	Dirt, vermin and other conditions prejudicial to health.
British Other Nations	4,718	eo e4	56	151

(CLASSIFICATION OF NUISANCES).

#### SANITARY DEFECTS.

Inspection of crews' accommodation continues a most important part of the Port Health Inspector's duties.

Whilst revealing numerous instances of the continuance of defects, which, with improved supervision by responsible officers and a responsive crew, should never occur, there are indications in the inspections that owners and superintendents are showing a happier spirit and a more earnest desire to give satisfactory accommodation to the personnel on board.

The elimination of out of date tramps and the substitution of faster and more economically run new tonnage with accommodation according to modern standards is still slow of accomplishment. The extensive building of oil tankers has set a high standard of ship board comfort for their personnel.

THE TOTAL NUMBER OF VESSELS USING THE PORT DURING 1954
IS AS FOLLOWS:—

Motor Vossele		$3,828 \\ 2,503 \\ 1$
TOTAL	-	6,332

The Number of Vessels on Which Defects were Found are as Under:—

British —Steam Motor	104 76	
Foreign—Steam Motor	7 4	180
Total		191

THE NUMBER OF VESSELS ON WHICH DEFECTS WERE REMEDIED ARE AS UNDER:—

British —Steam Motor	$\frac{126}{79}$	205
Foreign —Steam	10	205
TOTAL		222

#### Defects of Vessels include the following :-

		Defects.	Remedied
		(a)	(b).
Forecastles	dirty	19	23
	neglected paintwork	41	49
	verminous	82	100
	litter to destroy		2
Sleeping Quarters	dirty	1	
	dirty bedding	1	4444
	verminous	1	2
	discarded beds to		
	destroy	1	
Officers' Accommodation	verminous	4	8
	verminous	2	1
		40	0.0
Messrooms	verminous		36
	tables to cleanse	1	
	defective tables	1	1
Food Lockers	dirty	2	2
	neglected paintwork		1
	defective	. 1	1
W.C's.	dirty	2	3
	foul or choked		3
	defective		7
	defective flush	2	3 7 4 2 2
	inadequate flush	2 2 2	2
	seats to repair	2	2
	inadequate		1
Washrooms	dirty	1	1
	neglected paintwork	1	1
	defective showers	3	4
	defective basins		7
	defective salt water	,	
	cocks	1	
	defective water supply		1
	defective taps	1	1
	provision of water supply	2	2
	edpp.j		
Galley	dirty		3
	verminous	46	50
	neglected paintwork	3	2
Pantry	verminous	49	57

		Defects.	Remedied
		(a)	(b)
Provision Storerooms	verminous		8
	dirty	2	1
	neglected paintwork harbourage to remove	1	1
	flour store weevil		
	infested	9	6
Refrigerated Chambers	dirty	2	3
	handling room		
	verminous	4	4
Dampness due to	condensation	4	7
	leaking decks	10	10
	water lodging on tank tops		2
	choked scuppers		19
	leakage from steering		
	gear	1	1
Defects of	ports, sky or decklights	s 16	19
	bulkheads		2 7
	floors	9 3	2
	bunks	3 3	2 4
	scuppers	1	4
	tables	3	3 12
	service pipes water tight doors	11	12
	steam pipes		5
	insulation	3	1
	storm valves		1 5
	waste pipes sinks	2	5 2
	door locks	1	ī
Water Storage	defective or unclean	1	6
Misappropriation			1
Ventilation	inadequate	3	3
	defective		3
Heating	inadequate	1	1
	defective	10	9
	defective stove pipes	1	2
Recommendations (a) s	uggested by your inspect	ors	
(b) ea	arried out.	(a)	(b)
Provision of messro	. 1		
Provision of drainage Provision of hot wa		1	1
Provision of washro		1	1
	ator	1	
	*		

# SECTION XIV—PUBLIC HEALTH (SHELL-FISH) REGULATIONS 1934 AND 1948.

No change.

#### SECTION XV-MEDICAL INSPECTION OF ALIENS.

1. Warrants of Appointments are held by the Medical Officer of Health and his part time deputy.

Dr. T. L. J. Coxon and Dr. J. O'Callaghan.

- One female assistant is engaged for duty during the examination of female passengers.
- The Medical Inspector of Aliens is present during the discharge of passengers.

There came into operation at the commencement of the Tourist Season of 1953, more commodious premises on shore for the purpose of inspection of passengers carried by the Bergen Steamship Company. These consist of spacious waiting rooms, interrogation rooms and medical inspection annexe. All are adequately furnished and heated.

Examinations of passengers from Oslo (Fred Olsen Line) are still performed on board but waiting rooms for passengers have been erected on shore.

TABLE SHOWING PASSENGER TRAFFIC FOR 1938 AND FROM 1945 TO 1954.

Voor		ngers. ad 3rd Class	Transmigrants.		
Year.	Inwards.	Outwards.	Inwards.	Outwards	
1938	26,656	27,220	664	207	
1945	3,504	5,372		*****	
1946	15,559	15,372	21512		
1947	21,179	19,974			
1948	28,126	25,985	****	*****	
1949	33,598	31,371	*****		
1950	35,560	34,482	****		
1951	35,974	35,669	*****		
1952	38,924	39,757	*****	*****	
1953	45,970	46,944	*****	*****	
1954	53,854	55,275	*****		

# Annual return by the Medical Inspector of Aliens for the year ended 31st December, 1954.

		Number	jected to detailed he exami- cal nation by the							
.832	Total	Number In- spected by the Medical In- spector		Lunatic Idiot or M.D.	Undesir- able for medical reasons	Physically incapacitated	Suffering from acute infec- tious disease	Landing neces- sary for adequate medical exami- nation	Trans- migrants	
(a) Total number of Aliens land- ing at the Port	23,050	20,164	1,214	1		OHER D			1	
(b) Aliens refused permission to land by Immi- gration Officer	29		_		O L	nunc.	. A . I		-	
c) Transmigrants		-		-	-	_				
Total Aliens arriv- ing at the Port	23,079	20,164	1,214	1	701			0.00		

Total number of vessels carrying Alien passengers 633

Number of Vessels dealt with by the Medical Inspector 584

Passenger traffic mainly from Scandinavia reached an all time high level with an increase over the previous year of some 16,000 passengers.

Plans for an increased schedule of sailings for 1955 are in preparation and it is confidently expected that another 20,000 will be accommodated.

#### SECTION XVI.-MISCELLANEOUS.

1. When death occurs on board ship at Tyne Ports the body is removed to the nearest mortuary and arrangements made for the interment.

#### FOOD INSPECTION.

# PUBLIC HEALTH (IMPORTED FOOD) REGULATIONS, 1937-1948.

#### TYNE COMMISSION QUAY, NORTH SHIELDS.

Foodstuffs imported from :-

#### OSLO.

	Tons.	Cwts.		Tons.	Cwts.
Fish	1,211	13	Canned fish	462	18
Herring	15		Reindeer Meat	5	11
Whalemeat	4	7	Poultry	2	13
Butter	96	2	Margarine	233	4
Canned chicken	10	11	Livers	2	10
Animal casings	12	2	Canned meat	2	1
Flour	21	13	Fat	18	5
Rye meal	21	13	Condensed milk	2	19
Crispbread	19	. 19	Provisions	41	2
Eggs	184	16	Cheese		10
Chocolate		13			

#### BERGEN.

	Tons.	Cwts.		Tons.	Cwts.
Fish	11,834	13	Stockfish	6,933	19
Herring			Smoked Herring	2	13
Cod liver oil	115	5	Whalemeat	41	12
Animal casings			Liver	32	3
Canned fish		4	Canned meat	18	
Canned chicken	278	12	Cheese	573	7
Butter			Poultry	34	9
Condensed milk		4	Margarine	80	10
Bilberries	6	10	Provisions	21	9
Eggs					

#### GATESHEAD QUAY.

#### BELFAST.

	Ton	s.	Cwts.		Tons.	Cwts.
Fruit pulp		2	10	Canned fruit	27	9
Canned meat		12	10	Canned vegetables	*	10

#### LONDON

	Tons.	Cwts.		Tons.	Cwts.
Margarine	1,045	5	Confectionery	1	12
Canned meat	4	10	Date .		9
Provisions	2	13	Syrup	18	9
Tea	3	1	Nuts		6

#### LIVERPOOL.

	LIVER	POOL.	
	Tons. Cwts.		Tons. Cwts.
Beans	2 3	Apples	
Corned beef	1 16	Pears	
Ham	8	Sugar	
Sausage meal		Margarine	504 18
Cooking fat	203	Canned meat	
Biscuit powder Canned fruit		Marshmallow	2 10
Canned Iruit	3 9		
	Н	ULL	
	Tons. Cwts.		Tons. Cwts.
Tomatoes		Lard	143
Margarine	6	Beans	. 1
	ABERI	DEEN	
Bacon	Tons. Cwts.		
Dacon			
	PORTS	MOUTH	
	Tons. Cwts.		Tons. Cwts.
Apples	117 14	Oranges	
Lemons			
	BEL	GIUM	
	Tons. Cwts.		
Biscuits	3 16		
	POR'	TUGAL	
		COM	
	Tons. Cwts.		
Port Wine	69 5		
	SP	AIN.	
	N.L.	alli.	
	Tons. Cwts.		Tons. Cwts.
Lemons	37 9	Oranges	68 19
	GERM	ANY.	
Canned meat	Tons. Cwts. 56 15	Canned fruit	Tons. Cwts.
Ham		Dried fruit	50 13
Eggs		Salt	50 19 450
	HOLL	AND.	
Consul	Tons. Cwts.	0 1	Tons. Cwts.
Canned meat Canned fruit		Canned vegetables	2 9
Fish		Potato flour Cocoa butter	
Bacon		Cheese	
Ground nuts	10	Egg white	3 9
Rice		Dried fruit	3 10
Butter	260 12	Beer and wines	231 5
Confectionery	117 9	Biscuits	
Farina		Cornflour	191 6
Drugs	1 12	Rusks	4

#### HOLLAND—continued

	Tons.	Cwts.		Tons.	Cwts.
Maize	4		Margarine	516	10
Fat		3	Tea		19
Eggs	45	14	Block milk	6	12
Condensed milk	7	1	Lard	28	11
Tapioea		19	Fruit pulp	7	
Pears	350	13	Grapes		14
Apples		16	Nuts		
Tomatoes		15	Melons	12	3
Gooseberries		17	Bilberries	4	2
Grape Fruit		2	Onions	,2374	
Lettuce	119	10	Peas	222	16
Cabbage			Shallots	4	17
Cauliflowers		1	Cucumbers	77	
Carrots		18	Potatoes	1,945	8
Dried vegetables		6	Beetroot	5	8
Red cabbage	1	19	Beans	4	14
Vegetables in brine	131	5			

#### BALTIC FLOUR MILLS.

			Tons.	Cwts.
From	Boston	Wheat	298	
,,	Hull		2,054	
**	London	55	494	
,,	Sunderland	,,	1,643	
,,	France	,,	8,461	
,,	Argentine	,,	4,481	
,,	Belgium	,,	498	
**	Australia	,,	5,540	
,,	Canada	,,	51,255	
22	United States America	55	1,408	
,,	Holland		1,065	
,,,	Antwerp	Maize	250	
"	United States America	,,	 1,744	
22	Hull	17	420	
"	London	7,1	650	
33	Canada	Barley	250	

#### DUNSTON FLOUR MILLS.

			Tons.	Cwts.
From	King's Lynn	Wheat	4,137	
,,	Hull		749	*****
,,	Sunderland	. ,,	 742	
**	Boston	. ,,	 838	4000
17	Argentine	- ,,	7,639	*****
,,	Canada	. ,,	25,006	44400
,,	France	,,,	2,443	
,,	Russia	. ,,	2,582	*****
**	Belgium	. ,, .	1,041	
,,	Holland	. ,,	505	81111
,,	Canada	Barley	252	
,,	Canada	Maize	254	
	Hull	2. 37	 202	

#### ADVICE AS TO SICKNESS.

Shipboard and other matters continue to be received and forwarded to the Health Department of other British Port Health Authorities.

#### POLLUTION.

Two great problems face Tyneside in ever increasing magnitude, both are questions of pollution, one of the air, and the other of the river.

Air pollution, following the tragic experience of London in 1952, when fatalities both human and animal caused by the combination of fog, smoke, and chemical fumes from premises and mechanically propelled vehicles, etc., caused general concern and alarm, has aroused the public conscience to a small degree; at any rate, to the extent of holding conferences to discuss ways and means of causing some abatement of the danger.

The arrival of an effective solution within the scope of Local or even Regional Authorities has however, not yet been effected.

The formation of "smog" depends on favourable atmospheric conditions together with the imperfect combustion of fuel and volatile emanation of irritant products.

Petrol, diesel oil, chemical and coal distillation all play their part in the problem, and in addition especially in an area so industrialised as Tyneside, the very imperfect combustion of coal in the production of heat in factory and home is a very potent factor.

Inferior coal and slowly burning fires (which have recently become so popular) with their capacity for all night burning, have both contributed to an atmospheric pollution extending over the whole 24 hours of the day.

These conditions persist along the entire extent of the industrial area of the Tyne.

Nor does the river itself contribute much as a lung of fresh air to ventilate the area.

Tugs and small river craft, with very few exceptions, are persistent offenders, the reason generally advanced being, that the stoking coal is too small, dirty, and poor in quality.

In periods of heavy weather, smoke hangs like a black pall over the river.

The other major problem is the high state of contamination existing in the river itself.

The river is tidal for the final 14 miles of its course, and as such, is deemed to be self-cleansing, being therfore, excluded from the provisions of the Rivers Pollution Prevention Acts.

Consequently, there is no necessity for any action by Riparian Authorities to ensure that their sewage is treated by sedimentation, chemical or aeration methods before being discharged into the Tyne.

The intensive new building programme undertaken by all these authorities, and sewer linkage with non-riparian bodies also busily engaged in extending their building area, has, in past years magnified what was recognised long before the war as a major nuisance and a potential danger to health. Each year the nuisance has got larger, and the cost of abating it greater, until now the cost of any combined or area scheme of sewage treatment is prohibitively expensive, and could only be undertaken by means of a very generous government grant.

Attempts could be undertaken however, to initiate local schemes whereby sedimentation and partial treatment of effluent could reduce the bulk of solid matter and the toxic character of the rivers of sewage from each authority, before it empties into the Tyne.

At present the artificial deepening of the river bed by dredging to a more or less uniform depth throughout its main tidal area, has reduced the scouring and cleansing action of the river velocity and thereby reduced the diffusive effects of the daily tides, until in the middle stretches of the area it is doubtful whether more than the mere surface water ever gets to the sea at all, being pushed back and forwards by each waning and waxing tide.

It is true to say that Tyne water in the industrial area has practically none of the accepted characteristics and quality of normal river water. It is lethal to fish, and to humans is probably more dangerous when swallowed than inhaled.

To judge the effect on health of these two problems by the yardstick of incontrovertible fact, is of course impossible. Morbidity statistics cannot be produced to prove an incidence of bronchial or intestinal disease sufficiently pronounced to allow of any authorative conclusion being drawn in respect of any one area as against another. The population is too 'fluid' in its character and too homogenious throughout the area for any such comparison.

It may, I think, be safely assumed, if not proved that :-

Grave potential danger to health exists throughout the area, irrespective of domicile, from both air and water pollution, and all Local Authorities, not those merely classed as riparian, in the area of South East Northumberland and North East Durham, have a vital interest in the presence in their midst of this danger; and in devising adequate measures, however costly, to procure its abolution.

#### PLAGUE, CHOLERA, YELLOW FEVER AND SMALLPOX.

No cases of plague, cholera, yellow fever or small pox occurred in the Port during the year 1954.

#### LAUNCHES.

Both launches are still in commission.

#### CO-OPERATION WITH OUTSIDE AUTHORITIES.

I have, in my opening remarks, stressed the dependence of the Authority upon H.M. Customs & Excise and H.M. Immigration Service—these being the two Government Departments most intimately connected with our work.

The assistance of the Surveyors and general staff of the Ministry of Transport is also freely sought, and on their part, freely given. This is always a powerful help in dealing with constructional defects.

I desire once more to render to the Principal Officers and Staffs

of all the above departments, my grateful thanks.

To all others who have helped us in the past year—the General Manager and Staff of the Tyne Improvement Commission, Pilotage Board, and in particular the Members of my own staff, I extend my warmest thanks.

T. L. J. COXON, M.D., B.S., B.Hy., D.P.H.

Mill Dam, South Shields. April., 1955.





