#### [Report 1969] / Medical Officer of Health, Tyne Port Health Authority.

#### **Contributors**

Tyne Port Health Authority.

#### **Publication/Creation**

1969

#### **Persistent URL**

https://wellcomecollection.org/works/kw7ykmr7

#### License and attribution

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

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

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



# TYNE PORT HEALTH AUTHORITY



# ANNUAL REPORT

of the

MEDICAL OFFICER OF HEALTH

for the year

1969

T. C. FALCONER, M.B., Ch.B., D.P.H.



#### TYNE PORT HEALTH AUTHORITY

# 71st ANNUAL REPORT

of the

# MEDICAL OFFICER OF HEALTH

1969

T. C. FALCONER, M.B., Ch.B., D.P.H.
MEDICAL OFFICER OF HEALTH

Digitized by the Internet Archive in 2018 with funding from Wellcome Library

#### TYNE PORT HEALTH AUTHORITY

Constituted by Local Government Board's Order Dated 29th March, 1897.

LIST OF MEMBERS AT 31ST DECEMBER, 1969

ELECTED BY THE CORPORATION OF NEWCASTLE:

COUNCILLOR B. ABRAHAMS.

ALDERMAN N. C. BAILEY.

COUNCILLOR E. R. BALL.

COUNCILLOR MRS. A. A. DAVIDSON.

COUNCILLOR MRS. R. McVAIN.

COUNCILLOR MRS. A. I. TELFORD.

ALDERMAN DR. MALCOLM THOMPSON, M.D., M.R.C.P.

COUNCILLOR T. W. YELLOWLEY.

ELECTED BY THE CORPORATION OF GATESHEAD:
COUNCILLOR G. E. CARPENTER.
COUNCILLOR C. RYANS.
ALDERMAN B. N. YOUNG, o.B.E.

ELECTED BY THE CORPORATION OF SOUTH SHIELDS:
COUNCILLOR T. P. COLLINS.
COUNCILLOR G. M. MAGUIRE.
COUNCILLOR F. MANSFIELD.

ELECTED BY THE CORPORATION OF TYNEMOUTH:
ALDERMAN MRS. A. SOUTHWORTH.
COUNCILLOR S. B. SPENCE.

ELECTED BY THE CORPORATION OF WALLSEND:
COUNCILLOR W. C. GLADSTONE.
ALDERMAN J. A. McFADYEN. (Vice-Chairman).

ELECTED BY THE CORPORATION OF JARROW: ALDERMAN MRS, V. M. HOPE.

ELECTED BY THE CORPORATION OF HEBBURN: COUNCILLOR MRS. F. McINTYRE.

ELECTED BY THE HEBBURN URBAN DISTRICT COUNCIL: COUNCILLOR MISS V. LEDGER.

ELECTED BY THE FELLING URBAN DISTRICT COUNCIL: COUNCILLOR R. BUTTERWORTH.

ELECTED BY THE WHICKHAM URBAN DISTRICT COUNCIL: COUNCILLOR C. B. WESTGARTH.

ELECTED BY THE NEWBURN URBAN DISTRICT COUNCIL: COUNCILLOR W. H. F. SHACKLETON.

#### CONTENTS

SECTION	ı	Staff	age
	II		,
,,	11	Amount of shipping entering the district during the year	8
,,	III	Character of shipping and trade during the year	12
,,	IV	Inland Barge traffic	14
	V	Water supply	15
,,	VI	Public Health (Ships) Regulations, 1966	17
,,	VII	Smallpox	18
,,	VIII	Venereal Disease	19
,,	IX	Cases of notifiable and other infectious diseases on	10
,,	1A	ships	20
,,	X	Observations on the occurrence of malaria in ships	24
,,	XI	Measures taken against ships infected with or sus-	
,,,		pected of plague	24
,,	XII	Measures against rodents in ships from foreign	
		ports	25
,,	XIII	Inspection of ships for nuisances	27
,,	XIV	Public Health (Shell Fish) Regulations, 1934 and	
	2222	1948	30
,,	XV	Medical Inspection of Aliens and Commonwealth	30
	XVI	Immigrants	30
,,	AVI	(1) Burial of Persons Dying from Infectious	
		Diseases	33
		(2) Food Inspection	33
		(3) Clean Air Act, 1956	40
		(4) Radioactive Material	40
		(5) Launches	41
		(6) Boundaries of Tyne Port Health	
		Authority	41
		(7) Association of Sea and Airport Health Authorities	41
		(8) Dangerous Drugs	41 42
		(9) Merchant Navy Welfare Board	42
		(10) Education	42
		(11) Port Facilities	43
		(12) River Pollution	44
		(13) Medical Assistance and Treatment	44
		(14) Port Health Control—	11
		General Working Arrangements	45
		(15) Reorganisation of Health Services—	
		Observations of the Authority on "The	
		Green Paper''	46
Appe	ndix-	"Defensive Medicine-Port Health Control in the	
		United Kingdom"	47

MILL DAM,
SOUTH SHIELDS.
APRIL, 1970.

To the Chairman and Members of the Tyne Port Health Authority.

Mr. Chairman, Ladies and Gentlemen,

I have pleasure in presenting my Annual Report, as Medical Officer of Health to the Tyne Port Health Authority, for the year ended 31st December, 1969.

It is with great regret that I have to record the deaths of two members of the authority, Councillor M. T. Clarke, of South Shields, was appointed as a member of the authority in June 1969 and, at the annual meeting of the authority, he was appointed chairman; unfortunately he was prevented, by illness, from attending further meetings and died in September 1969. Alderman S. B. Spence of Tynemouth, who was appointed to the authority in June 1968 died in January 1970.

This report has been prepared in accordance with the directions contained in Form Port 20, of the Ministry of Health, which states that the information given under Sections I, V. VIII, XIV, XV and XVI, in an earlier report, which has not changed, need not be repeated annually but, a full report under each section is required quinquennially. This will fall due in my next Annual Report for the year 1970 and, for this reason, the opportunity has been taken to streamline the statistical content of this report.

The amount of shipping entering the river during the year was 3,607 vessels with a net tonnage of six millions. The trading position of the River Tyne has recently been the subject of some rather misleading comments; the continuing decline in the coal trade has been mainly responsible for the reduction in coastwise shipping during the year but the volume of traffic arriving from foreign ports was well maintained and, indeed, during the last four months of the year, showed an encouraging increase of twenty per cent. Moreover, the volume of imports has been maintained and shows promising signs of greatly increased imports of food. The passenger trade to Scandinavia is expanding and additional sailings, with larger ships, are planned. The new rollon service to Denmark is proving highly successful and the Port of Tyne Authority is actively engaged in attracting additional trade to the river and has plans for further developments. The declining volume of coastal trade has only a marginal effect on the work of the authority but the increase in foreign trade is making considerable additional demands on the staff, requiring some reorganisation of the work.

During the year, I was invited, by the Association of Sea and Air Port Health Authorities, to collaberate with Dr. W. C. D. Lovett, O.B.E., of the Welsh Board of Health, in the preparation of a memorandum on "The Anthrax Hazard of Imported Bone and Bone-Meal"; this paper was published in "The Medical Officer". I was also invited by the Society of Health, Nigeria, to write a paper for publication in the journal of the society. This paper, reproduced in the Appendix, page 47,

under the title "Defensive Medicine—Port Health Control in the United Kingdom" gives a history of the development of quarantine and outlines the principal responsibilities and duties of port health authorities.

At the time of writing, a government white paper on local government reorganisation and a green paper on the reorganisation of the health services have recently been published. The proposed Unitary Authority for Tyneside will include eight adjacent authorities, in addition to the riparian authorities represented on the Port Health Authority. Local Councils of the Unitary Authority, representing present local authority areas, will have the right to appoint members to other bodies and it is envisaged that the reorganisation order will make provision for the continuance of representation of the riparian authority areas on the Port Health Authority, which will retain its present functions as a local authority, in accordance with the recommendations of the Association of Sea and Air Port Health Authorities, of which the Authority is a member.

The green paper, on the reorganisation of the health services, makes provision for the employment by local authorities, or secondment from area health authorities, of medical officers for port health duties. There is, however, no specific reference in the paper to the title of Port Medical Officer of Health, although it is most important that this long established and internationally recognised office should be retained as, indeed, it has been in the recently revised International Code of Signals. Port health control is, to a large extent, concerned in dealings with many nationalities and in co-operation with customs and immigration services and it is important that well recognised and efficient control procedures, as set out in the Appendix, should be retained. The observations of the Authority on the Green Paper, submitted to the Secretary of State for Social Services, are shown on page 46.

Once again, I am pleased to express my most sincere appreciation of the valuable assistance received from H.M. Customs and H.M. Immigration Service. I am also grateful for the help given to myself and other members of the staff by the Port of Tyne Authority, the Harbour Master, the Port Operations and Information Service, the River Tyne Police, the Pilots, the Board of Trade, the Shipping Federation, shipowners, agents, masters, and many others.

In conclusion, I wish to record my appreciation of the support and encouragement I have received from the Chairman and Members of the Authority and I thank all members of staff for their assistance and loyal co-operation throughout the year.

T. C. FALCONER.

Medical Officer of Health.

TABLE A.	Any other appointments held	Medical Inspector of Aliens and Common- wealth Immigrants.	Deputy Medical Inspector of Aliens and Common- wealth Immigrants.	General Practitioner, Private Legal Practice.												
	Qualifications	.th April, 1968 M.B., Ch.B., D.P.H	M.B., B.Ch., B.A.O,	8	Cert. R.S.I. & S.I.E.J.B.	Foods	Cert. of P.H.I. Examin- ing Board, Cert. of Meat and other Foods.	Smoke Inspectors Cert Cert. R.S.I. & S.I.E.J.B.	Cert, of R.S. Associa-	Meat and Other Foods	S.R.N.					
SECTION I—STAFF	Date of First Appointment	.th April, 1968	1st July, 1965	1st October, 1963	6th Feb., 1933		1st Aug., 1962	12th May, 1965	1st Aug., 1968	12th July, 1957	1964	Dec. 1951 Sept. 1953	14th April, 1939 7th Aug., 1962	Resigned 5/9/69 20th Aug., 1968	14th Oct., 1968 13th Oct., 1969	
SEC	Nature of Appointment.	Medical Officer of Health	Health (part time)	Clerk to the Authority (part time)	Chief Port Health Inspector	Deputy Chief Port Health	Inspector	Port Health Inspector	Port Health Inspector	Port Health Assistant	Aliens' Inspection Assistant	Rodent searcher	Senior Launch Coxswain	Promoted Jun. Cox 6/9/69	Launch Hand	
	Name of Officer	Dr. T. C. Falconer		T. H. Ogle	W. B. Weatherston	J. Cosgrove	W. O. A. Austin, M.B.E., S.B.St.J. Wardmaster, Lieut.	Commander, R.N. (Rtd.)	J. Anderson	D. N. Wallace	Mrs. V. Moat	Hu	R. S. Burn	J. F. Colley	J. W. West D. McM. Embleton	

PORT HEALTH OFFICE. Medical Officer of Health and Chief Inspector—Mill Dam, South Shields.

Tel. South Shields 3419 & 5714. Telegraphic Address—"Porteith, South Shields".

Tel. North Shields 77379.

Chief Inspector-Newcastle 811173. Deputy Chief Inspector-Low Fell 8701711. Inspectors-South Shields 3528 & Whitley Bay 28025. Telephone Numbers of Residences— Medical Officer of Health—Whitley Bay 25020.

# SECTION II—AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR 1969

TABLE B.

China	N 1		Number	inspected	Number of ships reported as having, or					
Ships from	Number	Tonnage	by the Medical Officer of Health	by the Port Health Inspectors	having had during the voyage, infec- tious disease on board					
Foreign Ports	1,429	2,551,427	850	1,364	52					
Coastwise	2,178	3,320,481	49	1,906	3					
Total	3,607	5,871,908	899	3,270	55					

The above figures do not include fishing vessels.

Total number of vessels visited by Inspectors: --

#### British Ships.

Steam		504	
Motor		1,385	
Fishing	,	162	
			2,051
For	eign Ships.		
Steam		143	
Motor		1,238	
Fishing		176	
			1,557
Rev	risits		1,312
			4,920

#### The Nationalities of vessels inspected were as follows:-

British	1,909
Belgian	2
Cyprian	6
Danish	180
Dutch	108
Eireann	2
Finnish	23
French	7
German	360
Greek	22
Icelandic	1
Israeli	2
Italian	1
Kuwaiti	2
Lebanese	2
Liberian	22
Maltese	2
Nigerian	1
Norwegian	440
Polish	1
Panamanian	40
Rumanian	3
Swedish	113
Spanish	4
Turkish	1
Thai	1
U.S.S.R.	15

#### Tonnage of vessels visited by Inspectors :-

1,144,629		
473,396	1 010 007	
	1,618,025	
2,330,017		
1,560,856	0.000.000	
	3,890,873	5,508,898
	-	
20,159		
19,449	00.000	
	39,608	
uring the year	ar were as	follows:—
		/33
ects		
ects		
ects		95
ects		95
ects		95
oustry		95
		95 1,312
DUSTRY	ng the year	95 1,312 was :—
oustry visited durin	ng the year	95 1,312 was:-
oustry visited duri	ng the year	was:-  1,312  was:- 21
oustry visited duri	ng the year	was:-  1,312  was:-  162
oustry visited durin	ng the year	was:-  1,312  was:-  162
oustry visited durin	ng the year	was:-  1,312  1,312  162
	2,330,017 1,560,856 20,159 19,449 uring the years	2,330,017 1,560,856

The majority of these vessels discharged their cargoes at North Shields Fish Quay.

Three deep-sea stern trawlers, operated by local owners, regularly fish in the White Sea, Barents Sea, Bear Island and Newfoundland fishing grounds, and their frozen cargoes consisting of fish, liver oil, and fish meal are discharged into modern cold storage at Albert Edward Dock.

At the end of the year, an addition was made to the fleet in the form of a similar vessel having twice the capacity of the existing trawlers. A further four vessels are now on order and when they come into service in 1970/1, it is believed that the fleet will be the largest of its kind in the United Kingdom.

Inspections are carried out on most fishing vessels, and deratting exemption certificates issued when required.

#### ARRIVALS OF FOREIGN FISHING VESSELS

Polish										 													14	17
German										 			. ,		 								1	19
Danish										 					 						 		4	40
Dutch	• •									 													4	10
Swedish	,									 					 								2	21
Others																								3
																							27	70

#### TOTAL INSPECTIONS

The number of vessels inspected during the year was as follows :-

Vessels	3,270	
Fishing Vessels	338	
Re-visits	1,312	
-		4,920

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

# TABLE C. PASSENGER TRAFFIC

Passengers

Inwards 69,030 Outwards

70,053

The bulk of the traffic is with Norway and long established services continue to be operated by the Fred Olsen Company to Oslo and Kristiansand and by the Bergen Steamship Company to Bergen, Stavanger and Haugesund. The service of the latter company was operated throughout the year by the s.s. "Leda" with two sailings per week and, in addition, during the summer season, by twice weekly sailings of the large modern m.s. "Jupiter" with stern loading for cars at a separate berth at Port of Tyne Authority Quay, North Shields; the adjacent passenger terminal is well appointed and has special facilities for dealing speedily with cars. Despite the restrictions of the travel allowance, until recently imposed on British travellers, and despite the fact that s.s. "Leda" was out of service with engine trouble for a few weeks during the peak of the summer service, increased passenger traffic has justified the augmentation of this service in 1970 with a sister ship m.s. "Venus". The passenger service of the Fred Olsen Company is maintained throughout the year by m.s. "Braemar" with increased sailings during the heavily booked easter and summer seasons.

The summer passenger service from Newcastle, Denmark Quay, to Esbjerg was highly successful and broke all previous records. The thrice weekly sailing schedule was extended and the service was operated by a larger vessel m.s. "Prinsessen" with partial drive-on facilities, depending on the state of the tide. From 1970 onwards, this service will be transferred from Newcastle to North Shields thus concentrating all the main Scandinavian passenger services. It is anticipated that two years hence, the Danish service will be operated by a large 10,000 ton vessel with greatly increased accommodation for passengers and roll-on facilities for cars.

These services, by regular passenger vessels, with accommodation for up to nearly 600 passengers, are augmented by smaller cargo vessels providing limited accommodation for passengers travelling to other European ports mostly in Holland and Germany.

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

#### Ceneral Merchandise-Imports.

#### Twelve months ended 31st December, 1969

Article	Tons.
Meat and Meat Preparation	29,684
Dairy Produce	22,619
Wheat	181,288
Other Grain	40,299
Fruit and Vegetables	25,756
Provisions	12,437
Timber—Pitprops	38,730
Timber—Deals, Battons & Boards	119,821
Timber—Other Timber	10,074
Iron Ore	1,234,011
Other Ores	51,383
Crude Fertilizers and Minerals	27,554
Petroleum Spirit	378,629
Oil Fuel	852,107
Other Petroleum Products	68,211
Chemicals	60,792
Iron and Steel Manufactures	17,750
Paper and Wood Products	39,321
Sand & Gravel (Dredged)	52,500
Other Goods	47,744
	3,310,710

#### Ceneral Merchandise-Exports (Excluding Coal and Coke).

#### Twelve months ended 31st December, 1969

Article	Tons.
Food	8,832
Zircon Sand	6,253
Oil Fuel	108,683
Petroleum Spirit	23,838
Pitch	12,182
Other Petroleum Products	2,158
Chemicals	35,717
Textiles	5,956
Non-Metallic Mineral Manufactures	8,083
Iron and Steel Manufactures	23,516
Non-Ferrous Metals	15,189
Machinery	30,993
Machinery Other Goods	14,156
	295,556

#### Coal and Coke Shipments-Twelve Months ended 31st December, 1969

Coal—	
Cargo— Foreign	Tons. 123,104
London	
Coastwise (excluding London)	980,980
	3,382,998
Bunkers	3,819
Total Coal	3,386,817
Coke-	
Foreign	267,653
Coastwise	1 100
Total Coke	272,083
Total Coal and Coke	3,658,900

#### Principal Ports from which ships arrive:-

Ships arrive in the River Tyne from ports all over the world. In addition to vessels engaged in normal commercial trading, a large proportion of the ships entering the river are bound for the extensive and well equipped ship repair yards and dry docks for which the Tyne is justly famed.

#### SECTION IV-INLAND BARGE TRAFFIC.

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

#### SECTION V-WATER SUPPLY.

#### Sources of Supply:—

- (a) To the district.
- (b) To shipping.

No change.

#### 2. Report of Tests for Contamination

Drinking water is supplied to shipping by means of seven waterboats and some 400 hydrants situated on quays and staithes, and at dry docks. During the year samples of drinking water were taken from seagoing ships, fishing vessels, tugs and various harbour craft; these were submitted to the Public Health Laboratory for bacteriological examination, the results of which were as follows:—

Satisfactory	Unsatisfactory	Total
170	16	186

Samples are taken as a routine measure and, in many cases, for specific purposes, some of which are given below.

#### m.v. "Lindisfarne"

A complaint was received regarding infiltration of salt water into the fresh water tanks. Investigation revealed a defect existing in the pipe lines connecting pumps to ballast and fresh water tanks. This was rectified, superchlorination carried out, and subsequent sampling showed the treatment to have been satisfactory.

#### m.v. "Invista"

One of a number of samples taken gave a count of 180+ colitorm bacilli, the remainder being negative. The tap from which the unsatisfactory sample had been taken was renewed and further samples taken, the results being negative.

#### m.v. "Anco Sound"

Complaints were received of unpalatable drinking water. It was found that some of the petro-chemical cargo had gained access to the resh water tanks; appropriate action was taken to prevent a recurrence of the leakage. Bacteriological examination of samples taken revealed a high coliform count; the contents of the tank were discharged to waste, and in view of the nature of the contaminating liquid, cleansing of the tank was carried out by the use of steam hoses. The ship sailed be ore it was possible to take further samples.

#### m.v. "Crystal Cem"

Three samples showed a large number of coliform bacilli to be present; the ship had left for Fowey and the port health authority was notified of the circumstances by telephone and confirmatory letter.

One sample taken from the galley showed a high coliform count; subsequent sampling showed that flushing out of the fresh water system had been effective in removing the source of contamination.

#### m.v. "English Star"

Three samples taken showed the presence of fæcal bacilli. Superchlorination was carried out, and subsequent sampling showed the water to be of a satisfactory bacteriological standard. m.v. "Kirtondyke"

This vessel arrived at the Tyne with a recent history of unsatisfactory drinking water. Three samples were taken, all of which were unsatisfactory; the Board of Trade was notified and the owner contacted with a request for immediate action to be taken. The ship sailed from the Tyne, and action was taken at the next port of call.

### 3. Precautions taken against Contamination of Hydrants and Hosepipes

No change.

### 4. Number and Sanitary Condition of Water Boats, and Powers of Control by the Authority

The following seven water-boats are available for the supply of drinking water to shipping using the Tyne Ports:—

Name of Water B	oat	Name of Owne	
"Crystal Stream"			Messrs A. Gibson.
"Harcuss"			Messrs A. Gibson.
"Shearwater"			Messrs A. Gibson.
"Britannia G"			Messrs A. Gibson.
"Daphne H"			Messrs. A. Gibson.
"Limnell"			Messrs. Keedy.
"Drake"			Messrs. Keedy.

Water chlorinated at 1 part per million is supplied by these water boats to a large proportion of the shipping in the Tyne, particularly to vessels lying at buoys and in parts of the river not readily accessible to shore hydrants. In view of the large amount of water supplied by these craft, constant supervision is exercised to ensure that hygienic practices are being observed and to take samples.

During the year 125 visits were made for all purposes including sampling, the results of which were as follows:—

Satisfactory	Unsatisfactory	Total
63	14	77

Suspicious or unsatisfactory samples accounted for approximately 18% of the total taken and, on a few occasions, there were also very small counts of Bacillus Coli. Whenever these conditions were found to exist, even to a minor degree, the water-boat was taken out of commission at once, the tanks superchlorinated and thoroughly flushed, the return to service being dependent on the receipt of a satisfactory bacter-iological standard being verified by the Public Health Laboratory.

The average of 18% unsatisfactory samples appears to be much too high, but it must be emphasised that the average for all water-boats, with the exception of one, was 6%. This boat, when in service, gave 66% unsatisfactory samples, and was given constant attention, superchlorination being carried out after every unsatisfactory sample was found. At the end of the year, completely satisfactory conditions had not been achieved, and constant vigilance will continue to be exercised over this vessel.

All other water-boats have maintained a high standard of hygiene with the ready co-operation of owners and crews.

# SECTION VI—PUBLIC HEALTH (SHIPS) RECULATIONS 1966.

1. List of Infected Areas (Regulation 6)

No change.

Radio Messages (Regulations 13 and 14 (1) (a) and (2)
 No change.

Notification Otherwise than by Radio (Regulation 14 (1) (b)
 No change.

4. Mooring stations (Regulations 22 to 30)

No change.

- 5. Arrangements for: -
  - (a) Hospital Accommodation for Infectious Diseases
    Queen Elizabeth Hospital, Gateshead.
  - (b) Surveillance and Follow-up contacts No change.
  - (c) Cleansing and Disinfection of Ships, Persons Clothing and other articles

No change.

#### 6. Regulation 18(1)

#### Prosecution

Under the above regulation, no one, except certain authorised persons, is allowed to board a vessel arriving from a foreign port until it is freed from control under these regulations. The penalties for such an offence are a maximum of £100 and £50 per day for a continuing offence. On 3rd July a representative of a local shipping firm, in spite of warning, boarded the Russian vessel m.s. "Kypu" on arrival from Leningrad before boarding and clearance by an officer of the Authority or of H.M. Customs.

In view of the flagrant disregard of previous warnings, the offender was prosecuted; the defendant ultimately pled guilty and was fined £50 and ten guineas costs. This was the first prosecution of this type by the Authority for many years.

#### SECTION VII-SMALLPOX.

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

The Newcastle Regional Hospitals Board has 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 vaccinial state of the ambulance crews.

Durham County Ambulance Service (Telephone Durham 4488) is responsible for the transport of all such cases in the Newcastle region and the vaccinial state of the ambulance crews is the responsibility of the County Medical Officer.

#### (3) Smallpox Consultants available :-

Name	Address	Hospital, Office or Surgery Telephone No.	Home Telephone No
Dr. J. Grant	15 Oakwood Avenue, Gateshead, 9.		Low Fell 875035
Dr. J. R. Lauckner	46 St. Georges Terrace, Newcastle upon Tyne and Newcastle General Hospital, Westgate Road.	Newcastle 38811	Newcastle 812132
Dr. W. Minns	County Hall, Newcastle upon Tyne.	Newcastle 28927	Humshaugh 317

(4) Facilities for laboratory diagnosis of smallpox.

These include electron microscopy which ensures rapid and accurate diagnosis.

Specimens are sent to the

Public Health Laboratory, General Hospital, Westgate Road, Newcastle upon Tyne, 4. Tel. 38811.

Particular attention is paid to the vaccination state of all crews of ships arriving from smallpox endemic areas and, where necessary, arrangements are made to perform vaccinations or, on occasion, to inform the next port of call.

#### SECTION VIII-VENEREAL DISEASES.

Information as to the location, days and hours of the available facilities for the diagnosis and treatment of venereal disease among merchant seamen and the steps taken to make these facilities known to seamen.

Facilities for the diagnosis and treatment of venereal disease are available at the following centres at the times shown below. Although venereal disease is not compulsorily notifiable, all seamen thought to be infected are advised regarding the importance of early treatment and are told where and when this may most readily be obtained.

Newcastle upon Tyne— General Hospital, Ward 34

Telephone: Newcastle 33320

Monday to Saturday—10.00 a.m.—12 noon.

Monday to Friday—2.00 p.m.—6.30 p.m.

North Shields— Preston Hospital, Ward 25
Telephone: North Shields 74101
Tuesday—2.30 p.m.—5.30 p.m.
Friday—3.00 p.m.—6.00 p.m.

South Shields— Diagnostic Centre, General Hospital.

Telephone: South Shields 62649.

Wednesday & Friday—10.00 a.m.—12.30 p.m.

Monday and Thursday—5.00 p.m.—6.30 p.m.

For the following particulars of attendances of merchant seamen at the above clinics, I am indebted to Dr. A. S. Wigfield, Consultant Venereologist at Newcastle and North Shields and Dr. B. Levy, Consultant Venereologist, South Shields.

	Newcastie	North Shields	South Shields
Syphilis	3	_	4
Chancroid		120 L	1
Gonorrhœa	44	11	19
Non-gonococcal Urethritis	52	14	30
Non-venereal treated	36	9	98
	135	34	152
Non-venereal	107	17	

Venereal disease continues to be prevalent amongst merchant seamen and, if adequate treatment and follow-up are neglected, it may produce a wide range of clinical manifestations. The recognition and treatment of the venereal diseases requires both a specialised and a wide knowledge of medicine. The Medical Officer of Health attended a most valuable and instructive week-end course at Newcastle General Hospital on 25th October; the speakers included local consultants and other outstanding specialists in this field.

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

#### TABLE D.

		Number of cases during the year.		Number of
Category.	Disease.	Pass- engers.	Crew.	ships concerned
Cases landed from ships	Infective Jaundice		1	1
from foreign ports.	Mumps	1		1
	Pneumonia		1	1
	Pleurisy		1	1
11214 21 - 1114 11	Enteritis	3	1	4
	Miscellaneous	13	4	9
Cases which have occurred on ships from foreign ports but.	Influenza		1	1
have been disposed of before arrival  Cases landed from other ships	Pulmonary Tuberculosis		2	2
m. 7 05.85 m. 9 08	Respiratory Infection	1		1
Cases which have occurred on ships from foreign ports, diagnosed, and treated on board.	Malaria Pneumonia Influenza Enteritis Fungal Infection	cases shown	1 1 68 4	1 1 8 3
	of Skin		3	3
	Miscellaneous		21	18

#### INFLUENZA

Influenza occurred in virtually epidemic form towards the end of February on board two vessels lying at Smith's Dock, North Shields. It seemed probable that in each case the infection was acquired from dock workers in the yard where the disease had been prevalent. The British tanker m.s. "Forthfield" had a crew of 52 of which 11 of the 20 British Officers and 15 of the 32 Chinese crew were affected in the course of a few days; as a result, the scheduled departure of the vessel was postponed for two days and additional temporary officers were signed on. At the end of February further cases began to appear amongst the crew of the British vessel m.s. "Clan MacDougall" and by the end of the first week of March, 3 of the 23 British Officers and 31 of the 58 Pakistani crew had fallen victim to the disease. Mention has been made of the enhanced importance which infectious disease assumes when it occurs within the enclosed and relatively confined community of a ship's company and these two outbreaks are classis examples of how manning, and indeed the safety, of the vessels might have been seriously affected at sea. This is the first occasion that the scheduled sailing of a vessed from the Tyne has been delayed on account of infectious disease; this postponement was achieved only by lending full support to the master who was under some pressure to meet a charter contract but was reluctant to sail with the effective manning of his ship reduced to such an extent. Although many of the patients, especially the Asiatics, seemed to be initially severely affected with high temperature and signs of incipient pneumonia, all responded well and fairly promptly to vigorous antibiotic treatment and it did not prove necessary to admit any case to hospital. On both vessels, strict measures were imposed regarding hygiene and disinfection and particular attention was paid to disinfection of the ventilating system which is well recognised as being a potential cause of spreading air-borne infections such as influenza.

#### INFECTIVE JAUNDICE

Under the Public Health (Infective Jaundice) Regulations, 1968; infective jaundice is a notifiable infectious disease. This condition, which is becoming increasingly common and may be severe, is moderately infectious and has a long incubation period, ranging from 15 to 40 days which makes control more difficult. The danger of such an infection spreading is greatly increased on board ship where a compact closed community is sharing food, water and possibly accommodation.

On 10th January, a case of infective jaundice occurred in a member of the crew of the Greek owned Liberian registered vessel "Donna Io" which had arrived at Smith's Dock, North Shields from Rotterdam; the patient was admitted to Sheriff Hill Hospital, Gateshead.

#### TUBERCULOSIS

On 18th February, a member of the crew of the British vessel m.s. "Afghanistan" was found to be suffering from active open pulmonary Tuberculosis. The vessel had arrived on the previous day at Palmer's Yard, Hebburn and most of the crew had paid off and proceeded to their homes throughout the United Kingdom. Each member of the crew remaining on board had a chest X-ray and all proved negative; thorough disinfection of the patient's cabin was carried out. The Medical Officer of Health in each area to which paid off crew members had proceeded was advised regarding the contact situation, of which these crew members would be unaware. Of these, eight rejoined the ship prior to sailing without having been X-rayed at home and, of these, five were X-rayed at South Shields and found to be clear. The remaining three had rejoined the vessel too late to be X-rayed locally and accordingly advice was sent to the Port Medical Officer of Health at Glasgow to which the vessel was expected to proceed after picking up a cargo of iron ore at Narvik whence the ship sailed from the Tyne.

Another case of Pulmonary Tuberculosis occurred in an Indian member of the crew of the new British vessel m.s. "Amra" completed at Readhead's Yard, South Shields. On 15th November, prior to the ship sailing to Teesport to load for her maiden voyage, the patient was admitted to the Ingham Infirmary, South Shields with a history of coughing up blood. A telephone call from the radiologist at the hospital confirmed a diagnosis of "open" pulmonary tuberculosis; i.e. a highly infectious form of the disease with open cavities in the lungs.. The Port Medical Officer of Health at Teesport was immediately informed.

#### ALCOHOLISM

Alcoholism, although less common amongst seafarers than in the past, still contributes a considerable occupational hazard. Excessive consumption of alcohol, when ashore in port, may on occasion result in police prosecution and, less commonly, in the need for medical treatment. Over indulgence on board, however, may, in the long term, cause or aggravate certain diseases and injuries, sometimes serious, may be sustained in the course of a drunken episode. Such cases, especially amongst foreign seamen, are often seen.

#### MISCELLANEOUS

During the year, a considerable number of suspected cases of infectious diseases were investigated; of these, only a small proportion proved to be of significance. However, it is always impressed upon the masters and senior officers of all vessels that it is of the utmost importance that all cases, where infectious disease is even remotely suspected, should be fully investigated. Not only is this in the interest of the patient but also in the interest of the full complement and owners of the ship. The neglect of infectious disease within the relative confines of a closed community on board ship, may result in a rapid spread of infection, with both damage to health and possible delay and thus additional costs to the vessels and their owners.

### VESSELS ARRIVING FROM INFECTED OR SUSPECTED PORTS.

Vessels arriving from Infected Ports were boarded by the Medical Officer of Health and Inspectors of the Authority as under:—

Name of Port.	Direct to the Tyne.	To the Tyne Indirect
Bombay		i
Freetown	1	1
Karachi		2
Madras		2
Porto Alegre		2
Rangoon		1
Rio de Janeiro	***	1
Santos		1
Singapore		1
Vitoria	190 00	1
*Smallpox +Cholera To	otal 1	13

During the year a considerable number of coloured crews (mostly Indian, Pakistani and Chinese) arrived by air for the purpose of manning new ships, or, crew changes. Their point of departure was generally an "infected" area, viz., Karachi, Bombay, Calcutta, or Hong Kong, and they sometimes arrived on board their vessels in the river within 48 hours of leaving these areas. Notice was received from the Medical Officer, London Airport, of such arrivals and surveillance was maintained during their sojourn in the port.

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

No cases, nor suspect cases of the above quarantinable diseases occurred in the Port during 1969.

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

In previous years, cases of acute malaria, some severe and even fatal, have been dealt with on arrival or may have been disposed of before arrival. In my previous annual report I was pleased to be able to report a complete absence of this disease arising on board ships arriving in the Tyne. In 1969, however, there was one case on board the British tanker m.s. "Ellenga" diagnosed on arrival from Fawley, at the Tanker Cleaning berth on 30th January. The patient, one of the Pakistani crew, who was suffering from a recurrence of malaria, was treated on board and made a rapid and uneventful recovery.

This low incidence of malaria may be attributed to the vigorous application of anti-malarial measures, including personal prophylaxis and is most encouraging in view of the number of ships arriving from malaria-endemic ports including the West African seaboard, notorious for malignant malaria.

# SECTION XI—MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED OF PLACUE

Plague is a serious infectious disease and is one of the six internationally recognised "quarantinable diseases". It is primarily a disease of rodents and may be transmitted to man, in the bubonic form, by the bite of an infected rat flea. It is essential, therefore, that all vessels should be kept as free from rats as possible; the procedure for doing this is described in Section XII. This matter is universally recognised to be of such importance that all deep sea vessels must comply with regulations which require them to have a valid Deratting or Deratting Exemption Certificate (See Table F).

During the year there were no cases, nor suspected cases of plague in ships arriving in the River Tyne.

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

 Should there be any report of rodent life on a ship, steps are taken to carry out an examination in which note is taken of runs, gnawings, old and recent excreta, together with the existence of temporary and permanent harbourage and its treatment.

On the result of this examination the appropriate treatment is decided, which may be poisoning, trapping or fumigation, the latter being carried out when the ship is empty.

- 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 necessary, are subjected to bacteriological examination.
- The deratting of ships is carried out by private contract between the agent and fumigating firms on the approved list of the Authority.

These firms are:-

Messrs. Contra Pest Services Ltd.

Messrs. Joseph Currie and Sons.

(Trapping and Poisoning only)

Messrs. Rentokil Laboratories Ltd.

The marine rat population has shown a steady decrease for many years, and on the occasions when evidence of rats or mice is found, the numbers are usually so small as to make the cost of fumigation, in both time and money, out of proportion to the result achieved. A system of prebaiting and/or trapping is now therefore quite common, being carried out by the above approved firms with results which are completely satisfactory to this authority and the shipowners concerned.

TABLE E.

Rodents destroyed during the year in ships from foreign ports.

Category	Numbers.	
Black rats	. 41	
Brown rats	. 4	
Mice	. 81	
Rats sent for examination	Nil.	
Rats infected with plague	Nil.	

TABLE F.

Deratting Certificates and Deratting Exemption Certificates issued during the year.

	Number of I					
After fumigation with.					Number of Deratting	Total
H.C.N.	Other fumigant (State Method)	After trapping.	After poisoning*	Total	Exemption Certificates Issued	Certificates Issued.
1	2	3	4	5	6	
***		1	1	2	224	226

<sup>\*</sup>state poisons used and number of Certificates issued after each poison.

#### Prevention of Damage by Pests Act, 1949.

### Prevention of Damage by Pests (Application to Shipping) Orders, 1951-1956.

Under these regulations examinations of coasting vessels are carried out with a view to ascertaining that they are rodent free, whereupon Rodent Control Certificates are issued, which are valid for four months. Vessels to which these certificates are issued are nearly all colliers, engaged in carrying coal to gas works and power stations in the south of England, and to which 44 certificates were issued during the year. Some of the colliers trade to the Continent, and require an International Deratting Exemption Certificate which covers their coasting voyages also.

The Ministry of Agriculture, Fisheries and Food operate a practical and theoretical course at Durham every year for Public Health Inspectors and Rodent Operators, in order to acquaint them with modern procedures of dealing with rodent infestation; the authority sends its Rodent Operators to these courses yearly.

#### SECTION XIII-INSPECTION OF SHIPS FOR NUISANCES.

#### TABLE G.

#### INSPECTIONS AND NOTICES

	Notices	served.		
Nature and Number of Inspections.	Statutory Notices	Other Notices	Result of Serving Notices.	
Original 3,270		136	71 complied with	
Revisits 95				
Total 3,365		136	71 complied with	

#### CLASSIFICATION OF NUISANCES

Nationality of Vessels.	Number inspected during the year.	Defects of original construction	Structural defects through wear and tear.	Dirt, vermin and other conditions prejudicial to health.
British	1,889		71	79
Other Nations	1,381			9

#### DEFECTS.

The pattern of defects found to exist on ships varies little from year to year. Cockroach infestation is still fairly common and, in spite of repeated treatments and preventative measures, eradication is difficult to achieve.

Quite a large number of defects was found to exist in the catering departments of ships; most can be rectified without major alterations and it is usually found that the co-operation of shipping companies through their masters and superintendents is readily given.

#### The total number of vessels inspected during 1969:-

Steam	 	647
Motor	 	2,623
	1	
		3,270

#### The number of vessels on which defects were found:-

British -	-Steam		34	
	Motor		87	
	Waterb	oats	2	
	Fishing	Vessels	4	
		_		127
Foreign-	-Steam		-	
	Motor		9	
		o pomenta T		9
				136

#### The number of vessels on which defects were remedied:-

British -Steam		12	
Motor		54	66
Foreign—Steam			
Motor		5	
	-		5
			71

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

Defects of Vessels include	the following:—	Defects	Remedied.
Accommodation	Dirty		6
Accommodation			3
	Neglected paintwork	24	1 91
	Verminous		21
	Litter to destroy		2
Food Lockers	Dirty	—	1
Clothes Lockers	Dirty	1	
W.C.'s	Dirty	1	2
	Defective flush		6
	Seats to repair		1
	Choked	2	1
Washrooms	Dirty		1
washrooms	Flooding		1
C II			
Galley	Dirty		3
	Verminous		22
Pantry	Dirty Verminous	1	1
			22
Provision store rooms	Dirty	2	1
	Verminous		11
Refrigerated Chambers	Dirty	1	1
Food hoist			2
			-
Dampness due to			1
	Leaking decks		1
	Leaking plates		1
n	Flooding		1
Defects of	Ports		1
	Bulkheads		1 0
	Doors		2
	Bunks		1
	Tables		1
	Service Pipes		2
	Choked Scuppers		8
	Deck Covering		8 3
	Shelving Wooden Preparation	0	0
	Benches	30	15
	Chopping Blocks		8
	Waste Pipes		4
	Galley Fittings		14
	Built-in Units		7
	Refuse Chute		
	Settees	1	
	Water Cooler		
Contaminated Fresh Water	Supply	9	4
Misuse of Space			1
Ventilation inadequate			4
Heating inadequate			1
Excessive Smoke Emission		17	17
Mice Infestation			1
		-	
		315	212

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

There are no shell fish beds within the jurisdiction of the Tyne Port Health Authority.

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

The Medical Inspectors of Aliens holding warrants of appointment at 31st December, 1969 were as follows:—

Dr. T. C. Falconer, Medical Officer of Health.

South Shields-

Dr. J. O'Leary, Deputy Medical Officer of Health;

Dr. T. Lyons.

Dr. D. Fairbairn.

Newcastle upon Tyne-

Dr. E. J. Carmichael;

Dr. A. L. M. Graham.

Dr. D. Field.

Other Staff.

Mrs. V. Moat, S.R.N.

#### Organisation of Work.

Most of the work of medical inspection of aliens arises in connection with the Norwegian mail-boats, and is carried out by the Medical Officer of Health who attends disembarkations at Port of Tyne Authority Quay, North Shields at 7.00 a.m., and further arrivals at mid-day, or later at week-ends; there are additional mid-morning arrivals during the summer season. Dr.'s O'Leary, Lyons and Fairbairn who are partners in general practice, carry out relieving duties as required.

The summer season passenger service between Newcastle and Denmark continued with three sailings per week with disembarkations at Newcastle Quay at 1 p.m. This schedule did not permit the Medical Officer of Health to attend all disembarkations which, on certain days, coincided with the Norwegian mail-boat arrivals at North Shields. To assist in the medical inspections at Newcastle, Dr.'s Carmichael, Graham and Field who are in partnership in general practice, acted as additional medical inspectors of aliens when required. As mentioned elsewhere, from 1970, this service will also operate from North Shields.

#### Nature and amount of Aliens Traffic.

# MEDICAL EXAMINATION OF ALIENS Aliens Order, 1953.

during the year ended 31st December, 1969.

1. Number of ships arriving carrying	passengers	4
2. Number of ships arriving carrying	g alien passengers	4
3. Total number of arriving aliens (e	xcluding crews)	21,6
4. Total number of aliens medically	examined	2
5. Reports and certificates for aliens	medically examine	ed:—
Nature of report or certificate	Total number of reports and certificates issued	Aliens not permitted to land
Unsound mind or mentally defective		
3 (1) Undesirable for medical reasons		
(a) Inability to support		
3 (2) (b) Likely to require medical treatmen	t	***
(c) Inability to support and likely to require medical treatment.	1	
C Conditionally landed for further medical examination		
Totals		

#### Accommodation for Medical Inspection and Examination.

At the Port of Tyne Authority Quay, North Shields, there is a well appointed passenger terminal building with medical inspection room and waiting room; these facilities are available to passengers travelling by the s.s. "Leda" of the Bergen Line. The larger vessel m.v. "Jupiter", of the same company, operates from a modern "roll-on" berth further up the same quay and the adjacent terminal building is very well equipped and also includes a medical inspection room and waiting room. In the case of the Fred Olsen ships, which also operate from Port of Tyne Authority Quay, passport control and medical examination of aliens is carried out on board ship; this is less convenient and entails dealing separately with first and second class passengers.

For passengers arriving from Denmark at Newcastle, at Denmark Quay, a modern passenger terminal includes a well appointed medical inspection room. On the transfer of this service to North Shields in 1970, the medical facilities already in use for the Norwegian traffic, should prove adequate.

#### COMMONWEALTH IMMICRANTS ACTS, 1962 and 1968.

#### Medical Examination of Commonwealth Immigrants.

The arrangements regarding the arrival of vessels carrying Commonwealth Immigrants are similar to those in operation in respect of aliens, and all the Medical Inspectors hold warrants of appointment as Medical Inspectors of Aliens and Commonwealth Immigrants.

#### MEDICAL EXAMINATIONS.

during the twelve months ending 31st December, 1969.

- 2. Total number of Commonwealth citizens medically examined ... 1
- Reports and Certificates for Commonwealth citizens medically examined:—

Nature of report or certificate	Number of reports or certificates issued	Number of Commonwealth citizens refused entry
A Suffering from mental disorder		
B (1) Undesirable for medical reasons		
B (2) Likely to require major medical treatment		
Totals	0	0

#### SECTION XVI-MISCELLANEOUS.

(1)

#### BURIAL OF PERSONS DYING FROM INFECTIOUS DISEASE

The arrangements for the burial on shore of persons who have died on board ship from infectious disease may include disinfection and removal to mortuary prior to interment. In the case of death from a quarantinable disease, cremation would be recommended.

#### (2)

#### FOOD INSPECTION.

#### THE IMPORTED FOOD RECULATIONS, 1968

#### (a) Food Inspection

Imported foodstuffs came mainly from Norway, Holland, Belgium and Germany. They vary little in type and brand, and over many years, informal sampling has given consistently good results; for this reason the number of samples taken during the year is less than in past years.

On November 3rd a roll-on, roll-off service between Denmark and North Shields was inaugurated, using the facilities provided for the car ferries which trade between Norway and the Tyne in the summer months.

The principle imports are bacon, butter, animal food, and many other edible and non-edible products; in addition, meat has also been transported overland from Sweden and Finland and shipped through Esbjerg to the Tyne. The staff has been involved in a considerable amount of overtime with arrivals on the evenings of Sunday and Wednesday. The first two months of this trade accounted for over 7,000 tons of foodstuffs and with full cargoes, will involve the inspection of between 60,000 and 80,000 additional tons of foodstuffs per year.

This food is not destined for inland container depots but for private firms throughout the United Kingdom, and almost every item leaves the port area fully cleared by the Authority and Customs, the only exceptions being meat, casings, and similar commodities which cannot be adequately inspected at the port where the requisite facilities do not exist; regulation 5(3) of the Imported Food Regulations is then implemented and the local authorities of the areas, to which the food is destined, are notified by telephone and confirmatory notice.

Prior to the instroduction of the new roll-on, roll-off service between Denmark and North Shields, the Chief Port Health Inspector visited Denmark for a few days in September at the invitation of the Danish Agricultural Producers. The following week, the Medical Officer of Health paid a short visit as a guest of the Danish Bacon Board. Both these visits were profitable and full of interest and gave ample evidence of the very high standards of Danish food production, handling and hygiene. Of particular interest were the methods of dealing with bacon, imported by refrigerated container, which is untouched by hand from the time it is placed on stainless steel racks at the factory until reaching its final destination in the United Kingdom.

The inspection of imported food, landed at Newcastle Quay, has, for many years, been the delegated responsibility of Newcastle Corporation. The quay and dock sheds were taken over, in 1968, by the Port of Tyne Authority and, because of this and introduction of the Imported Food Regulations, 1968, it was considered appropriate that the responsibility for the inspection of such imported food should again revert to the Authority. Although this has been officially agreed by the Authority and the Corporation of Newcastle, there has been considerable delay on the part of the Ministry of Housing and Local Government in arranging for this mutually agreed transfer of responsibility, which after more than 2 years, has still not taken place.

The following tables show the types and quantities of foodstuffs imported to the Tyne and coming under the jurisdiction of the Authority.

# PORT OF TYNE AUTHORITY QUAY, NORTH SHIELDS.

#### NORWAY.

	Tons.	Cwts.		Tons.	Cwts.
Fish	9,610	8	Reindeer Meat		3
Canned Fish	373	18	Butter	338	6
Stock Fish	14	11	Margarine	33	5
Frozen Fish	318	8	Cheese		
Herring Meal	935		Eggs	83	4
Salt Herring	6	6	Crispbread		11
Oysters	-	5	Beer		
Casings	319	9	Provisions	24	4
Offal	142	13	Mineral Water	1	19
Cured Meat		4	Bilberries	35	2
Canned Meat	65	3	Liver Paste	2	7

#### DENMARK.

### Roll-on, Roll-off, November and December.

	Tons.	Cwts.	T	ons.	Cwts.
Bacon	2,156	18	Eggs	52	13
Canned Meat	969	1	Tinned Mussels		
Lard	49	18	Cream		2
Salam.	_	5	Beer	10	11
Prozen offal	10	13	Cod Roe	_	8
Animal Food	779		Animal Food (Cereals)	-	8
Butter	2,721	16	Rusks	3	18
Cheese	126	5	Biscuits	4	12
Fish	34	10	Ship's Stores	5	10
Cooked Potatoes	26	17	Liqueurs		1

#### SWEDEN.

	Tons.	Cwts.		Tons.	Cwts.
Meat	 53	19	Kidneys	18	14

#### FINLAND.

Tons. Cwts.

# JOSEPH RANK & CO. LTD., BALTIC FLOUR MILLS, CATESHEAD.

Wheat		Maize	
	Tons		Tons
Australian	25,351	Rumanian	1,558
Canadian	26,155	American	6,296
French	4,492	Argentinian	1,320
Spanish	2,544	Bulgarian	1,808
Rumanian	17,439		
Swedish	16,382		
English	3,395	Barley	
German	1,451		Tons
American	699	Swedish	2,347
Hungarian	2,363	Danish	1,086

# CO-OPERATIVE WHOLESALE SOCIETY LTD., DUNSTON FLOUR MILLS.

Wheat		Maize	
	Tons		Tons
Canadian	6,651	American	6,927
Spanish	2,632		
Australian	682	Barley	
Argentinian	951	17 (2007)	Tons
Russian		Swedish	2,680
		French	824

# PORT OF TYNE AUTHORITY QUAY, CATESHEAD.

### HOLLAND.

Cwts.		Tons	Cwts
			7
		3	14
		_	10
			1
1 3			3
4 5			16
3 15			2
1 1	Melons	1	3
7 15	Farina	10	7
3 3	Biscuits	1	
7 —	Rusks	30	5
2 —	Wines & Spirits	62	8
1 6	Tea	67	17
6 4	Drinking Chocolate	-	7
1 8	Rice	-	13
7 17	Ground Nuts	3	9
2 10			
	7 17 1 3 4 5 3 15 1 1 7 15 3 3 7 — 2 — 1 6 6 4 1 8 7 17	Deans   Dean	0       —       Beans       8         2       15       Gherkins       3         3       5       Beetroot       —         7       17       Pears       174         1       3       Tomatoes       4         4       5       Grape Juice       —         3       15       Oranges       22         1       1       Melons       1         7       15       Farina       10         3       3       Biscuits       1         7       —       Rusks       30         2       —       Wines & Spirits       62         1       6       Tea       67         6       4       Drinking Chocolate       —         7       17       Ground Nuts       3

The amounts and items of food condemned were :-

	Cwts.	Qrs.	Lbs.
Prawns	4	-	15
Pig's Kidneys	_		5
Lunch Tongues	-	2	22

The small amount of food which it was found necessary to condemn reflects favourably on the exporting countries, showing their standards to be good and well maintained.

#### GERMANY.

	Tons. (	Cwts.		Tons.	Cwts.
Canned Meat	2	16	Beer	18	12
Casings	12	17	Cheese	_ 3	12

#### BELGIUM.

Med-	Tons.	Cwts.		Tons.	Cwts.
Canned Meat	18	16	Biscuits	22	7
Canned Vegetables	16	11	Cauliflowers	2	9

# PORT OF TYNE AUTHORITY, ALBERT EDWARD DOCK.

#### DEEP SEA FISHING GROUNDS.

	Tons.	Cwts.		Tons.	Cwts.
Frozen Fish	3,342	-	Fish Meal	. 712	
Liver Oil	129				

# (b) The Imported Food Regulations, 1968

The power given to port health authorities to permit imported food to be inspected at final destination has proved to be useful. Although a percentage inspection of all consignments of imported food is carried out, it is not feasable to inspect casings in barrels, or meat in containers, owing to the lack of facilities. In the case of containerised meat, the containers are opened and a check made of the official certificates on all carcases or packages which can be seen, and the temperature and general condition of the container noted. If this inspection is satisfactory, a guarantee, that the container will remain sealed and locked until it reaches the final destination, is given by the importer and the container is allowed to proceed to its destination, the local authority of the district being notified by telephone and confirmatory notice.

Containerised Danish bacon is imported for distribution to the northern half of England and to the whole of Scotland. A refrigerated inspection bay is provided into which the racks of bacon can be drawn and inspected; a percentage of containers from each cargo is opened in this manner, and all official certificates are noted together with the temperature and external condition of the container.

As bacon is a regular import, being delivered to the same firms once or twice every week, the local authorities in the areas of reception are notified in advance by letter of the system of inspection and clearance under the regulations at the port, thus avoiding the need to notify the movement of individual containers for inspection inland. Bacon containers leave the port immediately following discharge, and staff are in attendance on the arrival of the vessel thus facilitating the speedy movement. Other classes of cargo such as butter, lard, canned meat, cream, etc., are normally removed from the port during the following days.

### (c) Official Certificates

The total amount of food imported during the year and requiring an official certificate on import was:-

#### 5,029 tons 7 cwts.

more than double that arriving during 1968, and consisting of canned meat, dried and cured meats, mutton, pork, bacon, beef, kidneys, livers, casings, reindeer meat and meat products, liver paste, salami, sausages and lard.

These foodstuffs were found to be accompanied by an acceptable official certificate and fit for human consumption, with the following exception. A consignment of 250 cartons of pig's kidneys from Norway weighing over 3 tons, was found to bear an official certificate incorporating an unrecognised establishment number. The Ministry of Agriculture Fisheries and Food was contacted, and they directed that the food could be released if considered fit for human consumption.

1500 cartons of canned sausage and 1,000 cartons of chopped pork and ham, weighing about 16 tons, arrived in a container which had sustained severe storm damage on passage. The food was destined for Newcastle upon Tyne whence it was allowed to proceed after notification of the circumstances.

In connection with the description of labels and the modifications and revocations of establishment numbers, mention was made in the Annual Report for 1968 of the large number of circulars dealing with the subject which are issued almost weekly by the Ministry of Agriculture, Fisheries and Food. During 1969, 113 circulars were issued involving amendments to 242 existing circulars, many making very small alterations to previous lists, and all involving the staff in clerical work requiring immediate attention.

### (d) Sampling

The total number of samples taken during the year was 55, all of which were submitted to the Public Analyst for examination regarding compositional standards, prohibited additives and colouring matters, etc. No samples were submitted to the Public Health Laboratory for bacteriological examination.

All the commodities sampled were found to be genuine, free from adulterants, prohibited colouring matters, and additives, with one exception. A consignment of 8 tons of apple filling was found to contain 1,280 p.p.m. of benzoic acid, and was not labelled. The filling had been despatched to a firm in the North West of England and the health department of the district was informed.

Two consignments of ground nuts arrived as a transhipment through Rotterdam; standstill notices were placed on each consignment ending the results of bacteriological examinations for aflotoxin being received; the results were satisfactory, and the consignments were released.

One sample of tinned mussels received a highly favourable report from the Public Analyst, coliform and staphyococcal organisms being completely absent, and the overall acidity being in accordance with regulations.

The following commodities were sampled:-

showing commodities were sampled.	
Cod roe	2
Fish pudding	1
Cheese spread and shrimp	2
Cheese spread	3
Dressed crab	4
Margarine	2
Marzipan Chocolate	2
Cheese spread and crab	1
Herring titbits in wine sauce	3
Cakes	1
Sild in tomatoe sauce	1
Sild in edible oil	1
Reindeer meat	1
Mackerel fillets	2
Smoked cod roe pâté	1
Trout fillets in jelly	1
Mandel pudding	1
Full fat whey cheese	1
Fish soup mix	2
Groundnuts	4
Coffee	1

Chocolate 1
Liver paste 1
Aspic powder paste 1
Strawberry filling 1
Apple filling 1
Herring in tomatoe sauce 1
Flat bread 1
Kippers 1
Mayonnaise 1
Smoked saithe 2
Brisling in tomatoe sauce 1
Lard 1
Cream 1
Pork in natural juice 1
Pork luncheon meat 1
Lunch tongues 1
Tinned mussels 1

### (e) Crews' Provisions

The disposal of crews' provisions after their rejection by the Board of Trade food inspectors as "unfit for British Crews" has continued to be supervised. This supervision is carried out as the result of a local arrangement with the other departments having an interest in such commodities, i.e. the Board of trade, Her Majesty's Customs Waterguard and Landing Officers, and the Ministry of Agriculture, Fisheries and Food.

Many of the items rejected by the Board of Trade food inspectorate are not unfit for human consumption but are below the standards set by the Board. Commodities rejected purely on grade may be perfectly sound and saleable to the public in the United Kingdom after inspection has been carried out by the authority's inspectors.

The final decision in the case of all meat, meat products and poultry rests with the Animal Health Division of the Ministry of Agriculture, eisheries and Food whose regulations govern the admissability or otherwise of such commodities from all countries. Whatever the final destination of such food may be, it may only be landed under a licence issued by the Ministry, and very strict precautions must be taken by those responsible for transport, storage, or destruction.

During the past year, crews' provisions dealt with consisted of various meats, flour, rice, breakfast cereals, preserves, milk, vegetables, offal, and an assortment of bottled and canned goods. The quantities of these commodities and the action taken are shown below.

	Tons	Cwts.	Qrts.	lbs.
Destroyed by burial or incineration	10	3	0	6
Cleaned and rturned to ship	5	15	0	10
Converted to animal food		16	1	. 8
Put under Custom's Bond	1	5	0	25
Total	17	19	2	25

# (f) FOOD AND CENERAL HYCIENE

Supervision is exercised over the storage, handling and preparation of food for those on board. Foodstuffs carried as cargo are also subject to scrutiny regarding stowage on board, handling during discharge, storage in quayside sheds, and handling when loading into vehicles transporting to final destination, in addition to regular examination in order to ensure that all imported food is fit for human consumption. General hygienic conditions on board are dealt with during routine inspection of each vessel arriving in port, when attention is given to sleeping accommodation, messrooms, washplaces and toilets, galleys, pantries and storerooms.

The Port of Tyne, being one of the major ship repairing ports in the United Kingdom, a large number of accumulated defects are dealt with during surveys and dry-docking; excellent co-operation is usually received from masters and euperintendents in ensuring that rectification of defects is carried out.

# (3) CLEAN AIR ACT, 1956. DARK SMOKE (PERMITTED PERIODS) (VESSELS) RECULATIONS, 1958.

During the year 374 timed observations were carried out on various types of vessels, and on 17 occasions it was necessary to contact masters or chief engineers in connection with contraventions of the regulations.

The annual report for 1968 metioned a welcome decrease in contravening smoke emissions; the main reason for an increase during 1969 was repeated emissions by the cross-river ferry s.s. "Northumbrian", an old coal burning vessel. Many contacts were made, in this connection, and the fullest co-operation had been received in an attempt to reduce the volume of smoke emitted, the principle cause being an inability to obtain suitable fuel, and the age of the vessel. The future of this ferry is in doubt, and it may be discontinued and replaced by a diesel engined vessel.

Other emissions have usually been due to mechanical breakdowns, and the testing of repaired mechanism; the ships' crews and superintendents have co-operated fully in keeping excessive smoke to a minimum.

### (4) RADIOACTIVE MATERIAL.

The stowage, marking, handling and other precautions required for the safe transport of radioactive materials are governed by regulations in accordance with the recommendations of the International Atomic Energy Agency. Radioactive materials have been imported from Norway in recent years but there were no such imports during 1969.

# (5) LAUNCHES.

The launch "Surveillant", new in 1966, continued to give good service. It was removed from the water, for the first time, for checking, overhaul and repairs in March 1969 and is due to have its first major overhaul at the next spring docking.

The other launch, "Hygeia", built in 1938, still gives reliable and satisfactory service and, despite its age, maintenance and repair requirements are not excessive. The annual overhaul, in November 1969, included complete dismantling and servicing of the engine and renewal of all electric wiring.

# (6) BOUNDARIES OF THE TYNE PORT HEALTH AUTHORITY.

The boundaries of the Tyne Port Health Authority extend from Newburn on the north bank of the river and Blaydon on the south bank, proceeding eastwards to take in all the riparian borders of the constituent authorities to where the river enters the North Sea between the piers of North Shields and South Shields. This navigable portion of the river coincides generally with the boundaries of the Port of Tyne Authority and extends for almost twenty miles.

The river is spanned by the Tyne Bridge which carries the Great North Road from Gateshead to Newcastle and there are, in addition, road and rall bridges further up river. There are no bridges across the remaining eleven miles of the downward reaches of the river which are served by a passenger ferry between Hebburn and Wallsend and a ferry carrying passengers and vehicles between North Shields and South Shields. Between Jarrow and Wallsend there are tunnels under the river for pedestrians and cyclists and an adjacent vehicular tunnel came into service in the autumn of 1967, greatly improving cross-river communications.

# (7) THE ASSOCIATION OF SEA AND AIR PORT HEALTH AUTHORITIES OF THE BRITISH ISLES.

The Tyne Port Health Authority is a member of the Association and is represented by the Chairman and the Medical Officer of Health at the Annual Conference which is normally held in the district of one of the constituent authorities. The 1969 conference was held in Swansea; amongst the subjects discussed, following the presentation of papers, were Crews' Provision, Oll Pollution, Drugs, Imported Disease, Port Health Developments and Salmonellosis.

The Medical Officer of Hea'th is privileged to be a member of both the Medical and General Committees of the Association and attends the meetings of these committees in London where a wide variety of subjects regarding port health control is discussed. The membership of these committees includes the Medical Officers of Health of all the major ports and also officials from government departments. A most valuable opportunity is thus afforded, to discuss problems of mutual interest and concern.

#### (8) DANCEROUS DRUCS.

During the year, five certificates authorising the purchase of scheduled Dangerous Drugs were issued under the Dangerous Drugs (No. 2) Regulations, 1964, Regulation 13 (2) of which states:—

- (a) The master of a foreign ship which is in a port in Great Britain shall be authorised to procure such quantity of drugs and preparations as may be certified by the Medical Officer of Health of the Port Health Authority within whose jurisdiction the ship is or, in his absence, by the assistant medical officer of health, to be necessary for the equipment of the ship until it reaches its home port.
- (b) A person who supplies a drug or preparation in accordance with a certificate given under this paragraph shall retain the certificate and mark it with the date on which the drug or preparation was supplied and keep it on his premises so as to be at all times available for inspection.

#### (9) MERCHANT NAVY WELFARE BOARD.

The Medical Officer of Health is a member of the local Port Welfare Committee which affords him further opportunity for useful liaison with representatives of such organisations as the Shipping Federation, Board of Trade, National Union of Seamen, Merchant Navy and Air Line Officers Association and the Consular Corps. Also represented are the various voluntary organisations such as the British Sailors Society, the Apostleship of the Sea and both British and Foreign Missions to Seamen, all of which deserve the greatest possible credit and support for the splendid work which they do amongst seamen and their families ashore.

# (10) EDUCATION.

The Medical Officer of Health lectures and gives practical instruction, in alternate years, to doctors undertaking post-graduate study, at the University of Newcastle upon Tyne, on the two year course for the Diploma in Public Health. Illustrated lectures were again delivered to voluntary and professional societies by the Medical Officer of Health who also lectured on first aid to sea-going personnel studying ashore.

The Chief Port Health inspector gave a series of lectures to pupil public health inspectors as part of the course laid down by the public health inspectors' examination board and practical instruction on the river was given to these students individually throughout the year. The authority is thus able to make a valuable contribution in the educational field, a though it would be impracticable to employ a pupil inspector because of the limited scope of specialised experience which could be offered.

The Port of Tyne is included among the ten major ports which, with the British Transport Dock Board ports, will be controlled by a National Port Authority, subject to pending legislation. The Tyne is the principal harbour of refuge between the Humber and the Forth, protection in all weather being afforded by the substantial piers at the entrance of the river. As one of the major seaports in the United Kingdom, the Tyne offers the following wide range of facilities for cargo, passengers, and the building and repair of ships of all sizes.

### (a) Port of Tyne Authority

The year 1969 was the first completed working year of the Port of Tyne Authority which, in August 1968, replaced the long established Tyne Improvement Commission and also took over municipal quays and port undertakings of riparian authorities. The Authority consists of fifteen members, appointed by the Ministry of Transport, five of which are nominated by local authorities, five by commercial interests, two represent organised labour and three are independent members. A vigorous policy of attracting new trade has been pursued and, in addition to the introduction of a highly successful roll-on roll-off service to Denmark, there are plans to reclaim and develop the 150 acre mud flat known as Jarrow Slake two miles from the harbour entrance.

The Authority also provide a VHF Radio Port Operations and Information Service for the use of vessels, agents and others involved in the working of the port.

## (b) Passenger Services

There are regular services throughout the year for passengers and cars between North Shields and Norway. The roll-on car ferry service to Bergen inaugurated in 1966 by the m.v. "Jupiter" will be augmented in 1970 with the addition of a sister-ship "Venus". Palletised cargo can be handled by fork-lift truck via the stern and side-doors of these vessels.

The thrice weekly summer service for passengers and cars from Newcastle to Esbjerg again proved highly successful. Not only was the season extended but the service was operated by a larger vessel, m.s. 'Prinsessen'. In 1970, this service will operate from North Shields with the same vessel which will probably be replaced with a much larger roll-on ship in two years time.

# (c) Ceneral Cargo Facilities

The extensive facilities, at present available, were further developed with the introduction, in November, 1969, of a new roll-on container service for the import of Danish bacon and butter from Esbjerg to North Shields for immediate distribution to Scotland and Northern England.

In addition to the quays of the Port of Tyne Authority there are numerous private wharves owned and operated by commercial undertakings. Shipments of coal, for which the Tyne has so long been famed, are from special wharves known as "staithes". These are owned by the Port of Tyne Authority, the National Coal Board and British Railways. The grain trade is handled by three large mills, each with berthing and discharging facilities. The Co-operative Wholesale Society plant at Dunston has a capacity of 20,000 tons. Joseph Rank's mill at Gateshead has a silo capacity of 22,000 tons, and that of Spillers of Newcastle, 34,000 tons.

There are two large modern oil terminals belonging to Shell and B.P. Oil Companies, at Jarrow and Esso Petroleum Company at Howdon and a smaller oil terminal owned by Velva Liquids Ltd., at Lawe Oil Wharf, South Shields.

The Iron Ore Quay at Tyne Dock is capable of handling large vessels with cargoes of up to 40,000 tons of iron ore; during the year nearly 14 million tons were imported.

There are modern and sophisticated facilities for the mechanised unloading, handling and storage of timber at Tyne Dock and Albert Edward Dock.

### (d) Shipbuilding and Ship Repairing

The River Tyne is justly famed for its marine engineering industry. Shipbuilding is now carried on by a consortium of firms, with 27 berths on the river; vessels of over 100,000 tons and a tanker of 250,000 tons have been constructed. There are ship repairing facilities for all sizes of ships not only alongside quays, and on slipways, but within no less than 31 docks, the largest of which will take vessels of up to 800 ft. in length with the possibility of extension to accommodate even larger ships.

Tyne shipbuilding has a record bulging order book ensuring work for more than two years ahead; it includes four 253,000 ton tankers one of which, the "Esso Northumbria", was launched by Princess Anne and has since been completed, the biggest ship yet built in the United Kingdom.

# (12) RIVER POLLUTION.

The responsibility of dealing with this long-standing problem rests with the Tyneside Joint Sewerage Board which was constituted in 1966. The Board submitted plans, for Ministry approval, in November 1968 for a purification scheme with works at Howdon, Wallsend, for primary treatment only in the first instance and final discharge at sea off St. Mary's Island, Whitley Bay. This first stage of the scheme, the cost of which will exceed £30 million, will include works for complete treatment at Dunston and a syphon under the river conveying untreated sewage from the south bank of the river across for treatment at Howdon on the north bank. It is hoped that work will commence in 1970 and that the first stage will be completed in six or seven years. The final stage will ultimately deal with sewage from areas, in proximity to the river, below the level of the proposed new main trunk sewers and will include extentions to the works at Howdon.

### (13) MEDICAL ASSISTANCE AND TREATMENT.

Although the statutory duties of the Medical Officer of Health are mainly concerned with infectious disease, he is more frequently called upon, at any hour of the day or night, to deal with all kinds of medical emergencies, including accidents, in addition to other illnesses of a non-infectious nature. When messages are received from shipping agents or by cable or radio regarding illness or accident on board inward bound vessels, arrangements are made for the patient to be seen on arrival and, if necessary, ambulance transport and admission to hospital arranged in advance.

A most valuable and useful liaison is maintained with the Medical Officers of the Shipping Federation who normally undertake the treatment of seamen suffering from illness arising on board a vessel after arrival and after clearance under the appropriate port health regulations. Such treatment may also be carried out by general practitioners either engaged by the shipping agent or under the National Health Service.

The Medical Officer of Health and members of the Staff deal with a wide variety of requests for information and advice from shipping companies and agents and also from private individuals regarding maritime medical and quarantine matters and vaccination for international travel.

# (14) PORT HEALTH CONTROL. CENERAL WORKING ARRANGEMENTS.

The daily practical work of Port Health Control is carried out from the Port Health Offices at Mill Dam, South Shields. These offices provide satis actory accommodation for the Medical Officer of Health, the chief port health inspector, and inspectorial and clerical staff; they are situated on the south bank of the river, approximately two miles from where the river enters the sea, and are a convenient base from which to cover the lower and middle districts of the river. The adjacent Mill Dam Quay enables the authority's two launches to berth at all states of the tide, and is within easy access of the launches' moorings at the ferry landing stage, South Shields.

In order to provide suitable facilities for the staff attending the rollon terminal for the examination of food, imported from Denmark, a small office, adjacent to the berth, has been rented from the Port of Tyne Authority.

The upper reaches of the river, including Newcastle and Gateshead, are under the control of the Deputy Chief Port Health Inspector. Here, boarding of vessels is generally direct from the quayside and, as there are good river crossing facilities by road bridge, transport throughout this district is mostly by car, the services of a launch being available as required.

The Clerk of the Authority, who is a solicitor, acting in a part time capacity, has an office at Norwich Union House, Newcastle, where only admini trative and financial matters are dealt with, and where the bi-monthly meetings of the Authority are held.

A close and most useful liais n exists between the officers of the Port Health Authority and those of the H.M. Customs and Excise. This ensures the speedy clearance of incoming vessels; delays are usually due to the failure of masters or agents to give advance warning, as required by regulation, of sickness on board a vessel and of the estimated time of arrival. Emergencies occurring outside office hours are usually of a medical nature and are the concern of the Medical Officer of Health rather than the inspectorial staff.

#### (15) REORGANISATION OF HEALTH SERVICES.

# Observations of the Authority on the Green Paper, submitted to the Secretary of State for Social Services.

- 1. The retention of Port Health as a Local Authority function is welcomed and it is recommended that Port Health Authorities should continue, as local authorities, to meet the special needs of established ports and estuaries.
- 2. Paragraphs 49 and 51 of the paper state that the "community physician", employed by the Area Health Authority, will work with the Local Authority "on public health and other services where medical advice is needed" and will perform the public health duties of the present Medical Officer of Health. There is concern that the paper contains no definite proposals regarding the important and specialised functions of Port rleath. Ships masters, especially foreigners, are unlikely to comply with the requirements of a distant "community physician" or to seek his aid and the majority of Port Medical Officers of Health including general practitioners and other doctors, who work on a part-time basis, are unlikely to become "community physicians".
- 3. Paragraph 46 states that local authorities will need medical officers, fuil-time or part-time, for such work as "the examination of people arriving at sea ports and air ports" and that such staff might similarly be seconded to the local authority. The immediate medical demands of port health, which may occur at any hour of the day or night, require more than "collaboration" between the medical staff of the area nealth authority and the staff of the local authority as proposed in paragraph 47. Local circumstances will determine whether medical officers be employed full-time or part-time by the Port Health Authority or seconded from the Area Health Authority in accordance with paragraph 46. In either event, it is essential that a medical officer be clearly designated as Port Medical Officer of Health and should continue to carry out his duties in accordance with the Public Health Officers (Port Health District) Regulations 1959 and also the Public Health (Ships) Regulations 1966 which are based on the International Sanitary Regulations 1951. The latter will be replaced by new International Health Regulations in 1971 and will form the basis of new Public Health (Ships) Regulations in 1971. It is important that these new regulations should continue in force so that they may provide for the maintenance of satisfactory and efficient port health control of international traffic. This will also ensure that the duties of the Port Medical Officer of Health remain mandatory and are not merely performed, on request, in a purely advisory capacity.
- 4. The office and title of Port Medical Officer of Health has long been recognised both nationally and internationally and is retained in the recently revised International Code of Signals. It is strongly recommended that provision be made, in impending legislation, for port health services to be administered on the lines suggested above.

#### APPENDIX

### DEFENSIVE MEDICINE

# PORT HEALTH CONTROL IN THE UNITED KINGDOM

T. C. Falconer, M.B., Ch.B., D.P.H.
Medical Officer of Health, Tyne Port Health Authority

[Published in the Journal of the Society of Health, Nigeria, Vol. 5, No. 1].

#### INTRODUCTION

Port health control is an important and highly specialised branch of preventive medicine, knowledge of which appears to be largely confined to those engaged in this field. The work of the Port Medical Officer of Health and his staff has been described as a "silent service" scarcely known to the general public.

# HISTORY OF QUARANTINE

It is only during comparatively recent years that a reasonable degree of uniformity in port health control in the majority of countries was attained following the introduction of the first Internatinal Sanitary Regulations in 1951. This notable achievement represented the culmination of more than a century of striving to obtain international health co-operation which was first attempted in Paris in 1851 at the first International Sanitary Conference on Quarantine. However, one of the earliest records of port health control dates back to the middle ages when the Venetians, who were prominent sea-traders of those times, were concerned lest the pestilence of plague be imported to the city. The Sanitary Council of Venice required, during a period of 40 days, or "quaranteraria", the isolation of sea-borne travellers and goods suspected of harbouring infectious disease; this accounts for the origin of the word "quarantine". The Venetian example was followed by other ports and during the next 500 years, before there was any understanding of the cause and spread of in ectious diseases, there were unco-ordinated efforts in many countries to prevent the importation of disease. In the mid-seventeenth century, when cholera, plague and yellow fever were prevalent in the United Kingdom, the first quarantine medical officers were appointed to the Customs service. In due course, port sanitary authorities were set up and the first port medical officer of health was appointed to London in 1872 and a similar appointment made for the Tyne seven years later, During the ensuing seventy years a variety of international conventions, conferences and agreements achieved only limited practical success, but by 1946, with a realisation of the increasing importance of international travel, the World Health Organisation empowered the Assembly to adopt quarantine regulations. The resultant International Sanitary Regulations, which came into effect in 1952 were responsible for a very wide measure of international co-ordination and agreement on port health control and provided the basis for quarantine legislation in many countries, including the United Kingdom.

### PORT HEALTH CONTROL

Although port health authorities have other duties, which may vary from country to country, their prime responsibility is the prevention of the importation of infectious disease and, in this respect, quarantine practice now conforms to well recognised standard procedures which are almost universally recognised throughout the world. Port health control in the United Kingdom has, since 1952, been carried out in accordance with the Public Health (Ships) Regulations, the 1966 Regulations, currently in force, are presently being revised as a consequence of new International Sanitary Regulations which will come into effect on 1st January, 1971. Somewhat similar regulations are applicable to aircraft. Port health control, in certain countries, is enforced by a central government service; in the United Kingdom, however, such duties are executed by officers of port health authorities comprised of locally elected representatives. In certain major ports this may, in effect, be the city council, where a number of ports are situated close together or along a river, such as the Tyne, the responsible port authority is a joint board comprised of elected representatives of the municipal authority of each

Infectious disease, within the relative confines of a closed community on board ship, presents special problems and the danger of spread of infection is greatly enhanced by the sharing of food, water and accommodation. Very few ships carry a doctor and it is therefore most important that the masters and senior officers of all deep sea vessels should act promptly and, if necessary, seek advice where infectious disease is suspected. In recent years there has been a decline in the number and proportion of ships with infectious disease, suspected or present, arriving in United Kingdom ports.

#### PROCEDURES

Port health control is best explained by considering, in the first place, the procedure adopted on the arrival of a "healthy" ship from a foreign port. The master of such a vessel is required to show the international flag signal Q by day or a red light over a white light by night. He is also required to complete a Maritime Declaration of Health giving details of his ship, passengers and crew and a list of ports of call, from the commencement of the voyage, with dates of departure; the completion of the declaration includes answers to six questions regarding the present or suspicion of infectious or quarantinable disease, particulars of which are entered on a schedule. In the case of ships arriving in the United Kingdom from ports in certain European countries, known as "excepted ports", the completion of a declaration of health is not required but the master of any ship is still obliged to notify all cases, or suspected cases, of infectious disease. On arrival, a "healthy" ship is boarded either by a port health inspector or by a customs officer; provided that, from the declaration or by questioning, the absence of infectious disease is confirmed, the ship is then free from control under the regulations, the Q flag is lowered, or the corresponding night signals extinguished, and then the ship's business may proceed without further restriction on anyone leaving or boarding. The precise method of enforcement of port health regulations varies from country to country and, elsewhere, clearance may be granted to a "healthy" ship by radio or by pilot.

Where infectious disease exists or is suspected on board a ship, the master must, whenever possible, give at lease four hours notice by radio, prior to expected arrival, direct to the port health authority or through an approved agent. This Standard Quarantine Message, which may be in code, includes information regarding estimated time of arrival, ports of call, infectious and other disease on board, deaths during the voyage, number of crew and passengers and intended disembarkation of sick or other passengers; a Declaration of Health must also be completed. On arrival of such a vessel, the international flag signal L I M must be shown; pending legislation will alter this signal to Z W in accordance with the latest International Code of Signals. This requires the ship to be boarded by a medical officer of the port health authority who may require the vessel to proceed to a suitable mooring for medical inspection; subsequent action will depend on the possible presence or suspicion of infectious or quarantinable disease.

# INFECTIOUS AND QUARANTINABLE DISEASES

The only infectious diseases, other than venereal disease or tuberculosis, mentioned specifically in the regulations, are the six quaraninable diseases comprising plague, cholera, yellow fever, smallpox, typhus and relapsing fever; the first question on the Maritime Declaration of Health asks if such a case or suspected case has occurred on board during the previous four weeks. Information regarding notification of these diseases is published in the Weekly Epidemiological Record of the World Health Organisation which is circulated to all port health authorities; from this is prepared a list of ports infected with quarantinable disease and this list is regularly circulated, with amendments as required, to pilots and customs officers.

The boarding medical officer may examine any case, suspected case or contact of infectious or quarantinable disease and, depending on circumstances, may require detention or removal to hospital of such a person and the disinfection of clothing and other articles. He may require the master of the ship to take such steps, as may be necessary, to prevent the spread of infection and any person disembarking may be required to give his name and destination.

Certain **additional** measures must be applied, with respect to the quarantinable diseases, to infected and suspected ships and to ships which have been in infected areas. In the case of plague, disinsecting, disinfection, surveillance and the destruction of rodents may be required; in the case of cholera, not only are surveillance and disinfection required but special steps must be taken regarding the disposal of wase, possible contamination of water and the prohibition of unloading beverages and certain foods; in the case of yellow fever, disinsecting for destruction of the vector must be carried out. Typhus and relapsing fever may require disinsecting, disinfection and surveillance but these two diseases will cease to be defined as quarantinable when the new International Sanitary Regulations came into force in 1971.

Smallpox, which remains to be considered, is the most serious potential health hazard to the United Kingdom. There is no reservoir of infection other than man and, since there is no specific treatment survival depends on vaccination and virulence of the virus. In its lesser form, variola minor, most prevalent in South America, there is a fatality rate of 1 per cent in the unvaccinated compared with 15 to 20 per cent in the

intermediate form of the disease in Africa. In variola major, the most virulent and widespread Asian form of the disease, between 30 and 40 per cent of the unvaccinated who contract smallpox die of it. In outbreaks of variola major, introduced into the United Kingdom in 1962 and Sweden in 1963, there was a case fatality of 40 per cent in the unvaccinated. The regulations, especially with regard to smallpox, are vigorously enforced in most European countries, including the United Kingdom, where a boarding medical officer may insist on isolation, surveillance for fourteen days from the last exposure to infection and may vaccinate any person not in possession of a valid International Vaccination Certificate; this certificate is also required of all persons returning from a smallpox endemic area and is valid for three years.

50

#### INTERNATIONAL CERTIFICATES OF VACCINATION

The only other International Certificates of Vaccination refer to cholera and yellow fever; the former is valid for six months and the latter for ten years. The vaccination certificate requirements, in respect of the three certificates, for international travel, are published by the World Health Organisation. In the United Kingdom, where there is no possibility of the spread of yellow fever because of the absence of a vector and where the possibility of cholera is extremely remote, only an international vaccination certificate against smallpox is required on arrival from all countries except European countries, Azores and Madeira, Canary Islands, Reunion, Bermuda, Canada, French Guiana, Greenland, Guadeloupe, Martinique, Netherlands Antilles, St. Pierre and Miguelon, Surinam and United States of America; the certificate is however required under the Public Health (Ships) Regulations on arrival from all smallpox infected local areas. By comparison, in Nigeria, where conditions and endemicity vary, vaccination certificate requirements are quite different. With regard to cholera, vaccination is required from arrivals from infected local areas and is recommended for travellers leaving Nigeria for an infected area. As regards yellow fever, vaccination is required from arrivals from all countries and for travellers leaving for a receptive area. Vaccination against smallpox is required from arrivals from all countries and for all travellers leaving Nigeria.

#### REVISION OF INTERNATIONAL SANITARY REGULATIONS

Reference has already been made to the new International Sanitary Regulations which will come into force in 1971, replacing the current regulations which have been in force for the past seventeen years. The aim of the revised regulations is to simplify and improve existing procedures in the light of new scientific knowledge and they are particularly designed to meet the new conditions created by the growing volume and speed of international traffic by sea, air and land, Only cholera, yellow fever, small pox and plague will remain as quarantinable diseases and typhus and relapsing fever will be placed in a new category requiring only surveillance. All international ports and airports must have adequate medical staff and quarantine services must also be provided at frontier posts on railways, roads and inland waterways; all containers used in international traffic, must be kept free from infectious materials, insects, rats, etc. When drafting the new regulations, the Committee on International Quarantine of the World Health Organisation, reviewed the quarantinable diseases.

### REVIEW OF QUARANTINABLE DISEASES

Although scattered cases or outbreaks of plague are reported in certain parts of Africa, America and Asia there has been no dissemination of the disease, through international travel, in recent years, but the danger still exists, especially with the ease of access of rodents by means of ramps in certain new types of ships. Vaccines are of limited value and rodent-control, de-ratting and disinsecting remain the only effective measures. Cholera is no longer confined to its long established endemic areas and the spread of the El Tor variety and the danger of further extension have caused anxiety. Modern treatment with rehydration is now effective but vaccination offers only limited and short lived protection and the detection and control of carriers remains very difficult. Recent spread of the disease has been mainly across land frontiers and by small coastal vessels and only to a limited extent by sea and air. Yellow fever has, in the past, occasionally invaded North America and Southern Europe from its regional foci in tropical Africa and tropical America. In recent years there have been severe epidemics in Africa, especially Ethiopia and Senegal, and although efforts towards eradication of the insect vector have reduced the risk of outbreak of the urban type of the disease, the jungle form persists with monkeys as the reservoir and treetop breeding mosquitoes as vectors; it remains an epidemiological mystery why Asia has remained free from yellow fever. Vaccination affords protection against this lethal disease; surveillance in both endemic and receptive areas is essential. Reference has already been made to the serious health hazard of smallpox which is the quarantinable disease most frequently imported through international traffic, Despite strict control over travellers from endemic and infected areas, smallpox continues to be imported into non-endemic countries. The only real solution to this problem is the elimination of the disease from its endemic foci; the eradication programme of the World Health Organisation has already achieved substantial results.

#### OTHER IMPORTED COMMUNICABLE DISEASES

In addition to the quarantinable diseases, other communicable diseases contracted abroad may present considerable further health problems and hazards on importation; these may include diseases, such as tuberculosis, already present in the United Kingdom. Travellers may also arrive suffering from exotic diseases such as typhoid fever; dysentery, both amoebic and bacillary; infections with internal parasites are becoming more common and an occasion case of leprosy is seen. Of particular concern is the increasing incidence of malaria which may be imported during incubation and not recognised; in recent years, undiagnosed cases of combral malaria have arrived by sea in various United Kingdom ports, including the Tyne. Cerebral symptoms may have a rapid onset and death may supervene before reaching port. Effective drugs for prevention and suppression are available and should be used wherever the possibility exists of acquiring infection.

#### MEDICAL INSPECTION OF ALIENS AND IMMIGRANTS

Although not strictly a port health function, medical officers of port health authorities are usually appointed, by the Home Office, as medical inspectors under the Aliens Order and Comonwealth Immigrant Acts.

52

Medical inspection is normally carried out at the request of an immigration officer, on anyone intending to remain in the United Kingdom for more than six months; the medical inspectors reports on anyone of unsound mind or mentally defective or anyone requiring major medical treatment or unable to support himself for medical reasons; the decision regarding entry into the country is made by the immigration officer and not by the medical inspector. With regard to immigrants from the Commonwealth, more satisfactory arrangements are being introduced whereby medical examination is conducted by an approved medical officer in the country of origin; following entry, immigrants and dependents may be required, for public health reasons, to report to the Medical Officers of Health at their ultimate destination. Asiatic immigrants frequently present problems because of language difficulties or illiteracy, but African immigrants usually have a good command of the English language.

#### ADDITIONAL PORT HEALTH DUTIES

Port health authorities prossess a variety of additional duties associated with infections disease and hygiene; these are usually carried out by port health inspectors who are qualified public health inspectors. Reference has already been made to rodent control in connection with plague; for many years rats have been recognised not only as pests, but as health hazards. All deep seas ships are required to possess a Derating Exemption Certificate which is valid for six months; such a certificate may be issued after inspection by the port health authority in any major port. It rats are present on board, they are destroyed by fumigation, poisoning or trapping and then a deratting certificate is issued; an exemption certificate is issued provided there are no rodents on board. Attention is given to ships' water supply, both from shore hydrants and water-boats, and to the condition of water tanks on board; samples are taken, as required, for bacteriological and chemical examination. The hygiene of accommodation for crew and passengers is subject to supervision and, in certain ports, this may extend to canal boats and inland barges; in the United Kingdom, the hygiene control over shell fish beds is enforced by port health authorities. Another responsibility is the implementation of the Clean Air Act to prevent excessive emissions of smoke from vessels; with the disappearance of coal-fired ships, such problems are becoming less common. The port medical officer of health is responsible for the authorisation of the supply of dangerous and scheduled drugs to foreign vessels; the master of a British vessel is authorised to obtain such drugs within the limits of the officially recognised scale.

A very important responsibility of the port health authority is the inspection of imported food to ensure its fitness for human consumption. This may entail detention for bacteriological or chemical examination; should this prove unsatisfactory the food may be destroyed, re-exported or released for animal feeding. Groundnuts and groundnut products are an important Nigerian export and it is worthy of mention that, on importation, sampling may be undertaken to determine the presence of aflatoxin. With the recent rapid development of the importation of food in containers in roll-on roll-off vessels in order to achieve rapid delivery, new regulations were introduced last year (The Imported Food Regulations, 1968) whereby, at the discretion of the port health authority and provided the contained remains sealed, examination of food may be deferred and become the responsibility of the inland receiving authority.

#### CONCLUSION

The Port Medical Officer of Health and his staff perform a wide variety of important, challenging and interesting duties, taking care to avoid unduly restrictive control and unreasonable hindrance to international travel and, while having proper regard for the public health, striving to achieve the following purpose, quoted from the preamble to the constitution of the World Health Organisation:

"The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion or political belief, the realisation of this aim has been brought nearer by the gradual evolution of international quarantine which, in addition to improving the physical lot of man, has helped in no small way to teach governments the value of international discussion, negotiation and co-operation."







