II

The Port Health Services

R C WOFINDEN, MD, MRCP, DPH, DPA

City & County of Bristol

REPORT FOR 1969

PORT HEALTH SERVICES ANNUAL REPORT

1969

Dr. G. N. Febry, Senior Medical Officer (Port)

This report is prepared on the lines indicated on Form Port 20, issued by the Department of Health and Social Security to Port Health Authorities

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1969

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TABLE A

STAFF

Name of Officer	*Nature of Appointment*	*Date of Appointment to: Department:*	*Present Post:*	*Qualification*	*Any Other Appointments held*
Wofinden, Dr. R. C.	Port Medical Officer of Health	29.9.47	1.2.56	M.D., M.R.C.P., D.P.H., D.P.A.,	Medical Officer of Health & Social Services
Skone, Dr. J. F.	Deputy Port Medical Officer of Health	1.10.59	1.10.59	M.D., B.S., D.P.H., D.C.H., D.I.H.,	Deputy Medical Officer of Health & Social Services
Febry, Dr. G. N.	Senior Medical Officer (Port)	20.1.58	1.5.62	M.B., Ch.B., D.P.H.	—
Tomlinson, Dr. P.	Medical Officer (Port)	20.11.57	10.10.60	M.D., B.S., D.P.H., D.T.M.&H.	—
Hamblett, Dr. E. P.	Medical Officer (Port)	5.5.69	27.6.69	M.D., Ch.B., D.P.H., D.C.H., D.T.M.&H.	—
Wood, Dr. A. J.	Medical Officer (Port)	15.2.64	1.11.68 (ceased—1.6.69)	M.B., B.S., D.P.H.	—
Creech, G. J.	Chief Port Health Inspector	24.4.33	19.12.63	M.B.E., C.St.J., F.R.S.H., M.A.P.H.I.,	Chief Public Health Inspector
Downing, G. F.	Deputy Chief Port Health Inspector	13.4.64	13.4.64	A.M.I.P.H.E., M.R.S.H., M.A.P.H.I.,	Deputy Chief Public Health Inspector
Davies, E. I.	Specialist Inspector (Port)	15.5.37	1.11.43 (ceased—2.2.69)	Certs.R.S.H., P.H.I.E.J.B., R.S.H., Meat and other Foods: Testamur of Welsh School of Medicine: Public Health & Hygiene: Master Mariner (Foreign Going)	—
Howells, E. M.	Specialist Inspector (Port)	1.5.67	3.2.69	Certs of R.S.H. & P.H.I.E.J.B. & R.S.H. Meat & Other Foods	—
Fowler, C. H.	Public Health Inspector (Port)	1.9.57	1.9.57	Cert. of R.S.H., P.H.I.E.J.B.,	—
Lack, W. H. G.	Public Health Inspector (Port)	23.7.62	23.7.62	Certs of R.S.H. & P.H.I.E.J.B. & R.S.H. Tropical Hygiene	—
Stinchcombe, E. N.	Public Health Inspector (Port)	2.9.57	1.6.65	Certs of R.S.H. & P.H.I.E.J.B. & R.S.H. Meat & Other Foods	—
King, M. R. B.	Group Clerk	31.1.66	31.1.66	L.G.E.B. (Clerical Examination)	—

Departmental Addresses and Tel. Nos.—Central Health Clinic, Tower Hill, Bristol BS99 7BQ. Tel. Bristol 21010 (STD. 0272-21010). Port Health Office, Avonmouth Docks, Avonmouth, Bristol BS11 9DH. Tel. Avonmouth 3038 (STD. 02752-3038). Telegrams: "Portelth" Bristol.

Preface

During 1969 there was marked fluctuation of trade within the Port and although there was a slight increase in the number of foreign and coastwise traders, the total tonnage was 257,596 less than in the previous year. Nevertheless, the total of 776,371 tons of imported food exceeded the 1968 figure by 183,000 tons.

Of the foreign arrivals, 193 vessels, a slight increase over the previous year, came directly from Smallpox infected areas and were boarded for health clearance purposes immediately.

Details of two fatal cases of malignant tertian malaria, reported in the Port in 1969, emphasise the need for taking prophylactic anti-malarial drugs while at risk abroad and for one month after return to the United Kingdom.

With increasing palletisation and containerisation the method of food inspection has been revised, because of the extensive use of warehouse accommodation and the diminished use of quayside transit sheds.

Mr. Evan Ivor Davies, who joined the Bristol Port Health Authority in 1937, after spending many years at sea as a foreign going Master Mariner, retired in February 1969. He was devoted to his work, quietly efficient, highly respected by his colleagues and a great source of help to many staff and students. His health had not been good for some time before his well earned retirement and I am sorry to record his untimely death in November.

Mr. Harold Ward, senior attendant at the Venereal Diseases Clinic, retired during the year, after almost fifty years of service in an important but little publicised branch of medicine.

I am grateful for the co-operation given during the year by officers of H.M. Waterguard, the Port of Bristol Authority and various shipping agents. This report is prepared on the lines indicated in form 20, issued by the Department of Health and Social Security to Port Health Authorities. I am glad to express my appreciation to Dr. G. N. Febry, Principal Medical Officer (Port), for collating the contents.

R. C. WOFINDEN,
Port Medical Officer of Health.

PORT HEALTH SERVICES

ANNUAL REPORT

1969

SECTION I

INTRODUCTION

The year was one of marked fluctuation of trade within the port. The vessels arriving numbered 5,608, 1,636 from foreign and 3,972 from coastwise ports, representing a total registered tonnage of 5,436,193. Although there was a slight increase in the number of both foreign and coastwise traders the total tonnage was 257,596 less than in the previous year.

Foreign imports totalled 3,732,773 tons and foreign exports 149,430 tons, both showing an overall reduction when compared with the 1968 figures. Imports of wheat, however, rose by 142,572 tons, cocoa by 18,862 tons, coffee by 9,991 tons and frozen meat by 1,361 tons, but canned fruit and tea showed decreases of 6,996 and 4,183 tons respectively. Nevertheless, the total of 776,371 tons of imported food exceeded the 1968 figure by 183,000 tons.

The rapid growth of warehouse accommodation and decreasing use of transit shed storage has necessitated a new approach to effective food inspection. 1,430 food samples were taken during the year.

Of the foreign arrivals, 193 vessels, a slight increase over the previous year, have come direct from smallpox-infected areas and have been boarded for health clearance purposes immediately on arrival.

Among the cases of sickness seen on board these vessels during the year those due to malignant tertian malaria are worthy of special comment. Falciparum malaria is potentially the most dangerous of all exotic diseases. With many vessels arriving at the port direct from endemic areas the geographical history is of the utmost importance. As the clinical picture of falciparum malaria is protean, medical reports of the two fatal cases seen at the port are given in detail in Section X of this Report. Attention has been drawn to the importance of anti-malarial drugs,—"if it were possible to persuade all people returning from the tropics, and especially from tropical Africa, to take regularly for one month prophylactic anti-malarial drugs, proguanil or pyrimethamine, it is likely that there would not be a single case of P. falciparum malaria among these returning travellers." (Shute P.G. and Maryon, M. B.M.J. 1969. 2.781.)

The Port Authority, determined to expand existing port facilities, have been revising the original West Dock Scheme and are spending over £1 million on new bulk cargo facilities within the existing dock system. A battery of five new 7½ ton cranes has been installed at West Wharf to speed up discharge of fishmeal, phosphates, concentrates and other bulk cargoes and five new 30 ton hoppers are to be erected on the quayside in the coming year. There are also plans for improving the handling and storage of grain, the biggest single import commodity into the port. Coupled with these developments, new amenity blocks have been provided for dock workers and berths adapted for container traffic.

February 1969 saw the retirement of Mr. E. I. Davies who joined the Bristol Port Health Authority in 1937 after having spent many years at sea as a foreign going master mariner. His life revolved very much around his work and the quiet efficiency with which he carried this out led him to be highly respected by all his colleagues. His valuable help was always forthcoming and there must be many staff and students who have benefited from his wise counsel and sound teaching. His failing health was apparent some time before his retirement and his untimely death in November came as a tragic blow to all who knew him.

SECTION II

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR

Comparative figures for foreign and coastwise vessels, together with import and export tonnages during the last five years, are shown in the following table:

Year	*Vessels normally trading* *Foreign*	*Coastwise*	*Tonnage of Foreign* *Imports*	*Exports*
1969	1,636	3,972	3,732,773	149,430
1968	1,615	3,815	4,044,015	200,964
1967	1,724	4,305	3,975,205	176,422
1966	1,699	5,167	3,987,037	234,309
1965	1,798	5,043	4,165,680	258,077

SECTION III

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

The character of shipping and trade is shown in Tables B and C.

TABLE B

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR

Ships from	*Number**	*Tonnage**	*Number inspected by the Medical Officer of Health*	*by the Public Health Inspector*	*No. of Ships reported as having or having had during the voyage infectious disease on board.†*
Foreign Ports ...	1,636	3,484,505	193	2,532	69
Coastwise ...	3,972	1,951,688			
Total	5,608	5,436,193			

* Figures supplied by courtesy of the Port of Bristol Authority. (Discrepancy between number of vessels shown as arriving and number inspected in foreign section arises from differing classification of "Foreign" and "Coastwise" vessels as applied by the Port of Bristol Authority and the Bristol Port Health Authority).

† Excluding vessels having venereal disease on board.

TABLE C(a)

PASSENGER TRAFFIC

		Seaport	*Airport*
Inwards			
	British (United Kingdom)	259	23,912
	British (Commonwealth)	57	149
	Alien	327	2,661
Outwards			
	British (United Kingdom)	146	22,356
	British (Commonwealth)	29	97
	Alien	135	2,624

PRINCIPAL PORTS from which ships arrive: Vessels arrive in the Port of Bristol from all parts of the world.

TABLE C(b)

CARGO TRAFFIC

PRINCIPAL FOREIGN IMPORTS & EXPORTS

	Calendar Years 1969	1968
IMPORTS	*Tons*	*Tons*
Cereal Products	5,279	4,871
Cocoa	49,182	30,320
Coffee	35,794	25,803
Feeding Stuffs for Livestock	544,633	529,964
Fertilizers	417,566	538,373
Fruit: Canned	20,142	27,138
Dried	2,095	2,260
Other kinds	12,639	23,388
Grain: Barley	78,756	500
Maize	253,944	430,863
Wheat	522,384	379,812
Other kinds	36,658	30,442
Metals: Iron/Steel	12,425	16,985
Non-Ferrous	76,201	134,882
Molasses	140,852	129,847
Oilseeds and Oilnuts	12,652	39,343
Ores	279,310	259,091
Paper	24,139	34,546
Petroleum Products	683,907	760,930
Provisions: Frozen Meat	24,076	22,715
Other kinds	44,775	38,844
Sugar	3,605	6,196
Tea	27,998	32,181
Timber	94,015	133,629
Tobacco	32,222	32,922
Wines and Spirits	8,211	7,510
Woodpulp	79,359	120,150
Other Goods	209,954	250,510
TOTAL IMPORTS	3,732,773	4,044,015
EXPORTS		
Carbon Black	4,039	3,385
Chemicals	3,270	2,839
Clay	4,908	5,988
Cocoa Cake and Waste	1,287	1,863
Coke	14,210	18,878
Government Stores	105	297
Metals: Iron and Steel	32,310	61,888
Non-Ferrous	23,297	24,124
Motor Vehicles and Parts	15,482	11,551
Ores	4,728	5,047
Petroleum	215	16,963
Strontia	514	2,457
Wines and Spirits	1,064	1,472
Other Goods	44,001	44,212
TOTAL EXPORTS	149,430	200,964

SECTION IV

INLAND BARGE TRAFFIC

Number of craft entering during the year }
Tonnage of craft entering during the year } *See Note*

Places served by the traffic:

Banbury	Newport
Barry	Sharpness
Bridgwater	Stourport
Cardiff	Swansea
Frampton	Upton
Gloucester	Worcester
Lydney	

NOTE: The number of craft and tonnage is included in the Coastwise Traffic. (See Table B. Section III.)

SECTION V

WATER SUPPLY

1. Source of Supply

(a) The District
(b) Shipping } No change

2. Reports of Tests for Contamination

(a) Premises

Water supplies to premises throughout the Docks areas have been sampled during the year and 21 bacteriological examinations have been effected. Only one sample was reported as unsatisfactory, it being taken from a foreman's office during the course of extensive quayside alterations at "N" Berth, Avonmouth. Follow-up samples were found to be quite satisfactory.

(b) Quaysides

No adverse report was received in respect of the 35 samples drawn from hydrants and supply hoses. This reflects well upon the hygienic standards maintained by water supply personnel who not infrequently carry out their duties under very arduous conditions.

(c) Ships

(i)	No. of ships from which samples drawn	151
(ii)	No. of bacteriological examinations	194
(iii)	,, ,, ,, samples satisfactory	177
(iv)	,, ,, ,, ,, unsatisfactory	17
(v)	No. of chemical analyses	12
(vi)	,, ,, ,, samples satisfactory	10
(vii)	,, ,, ,, ,, unsatisfactory	2

In all instances of an adverse bacteriological report with the vessel still in port, full tank cleaning procedure, followed by chlorination of the tanks, pipelines, filter, etc., has been carried out, on each occasion with the full co-operation of the vessel's owners and master. In those cases when the ship had sailed prior to the receipt of reports, detailed notification was made to the owners, and when applicable, to other U.K. port health authorities. Additionally, the Board of Trade was informed if a British flag vessel was concerned. During the year 4 vessels were treated and chlorinated and 2 others were subjected to chlorination only. All were British ships. The two unsatisfactory chemical reports enumerated above, related to salt water contamination of the drinking water supply on one British ship. The defective pipelines were taken out of use and satisfactory alternative arrangements made.

SECTION VI

THE PUBLIC HEALTH (AIRCRAFT) REGULATIONS 1966
THE PUBLIC HEALTH (SHIPS) REGULATIONS 1966

The above Regulations have been followed throughout the year and no major practical difficulties have been encountered. Port Medical Officers have paid particular attention to those vessels that have arrived direct from smallpox-infected areas together with those where there has been a case or cases of sickness on board. These vessels have been boarded as they have arrived at the entrance lock and for this work a medical officer has been available at all times. When applicable, smallpox vaccination certificates have been checked and 96 revaccinations were required. The assistance given by staff from the Havenmaster's Department, in particular Avonmouth Signal Station and the Dockmaster and the helpful co-operation of the Medical Officer of the British Shipping Federation Ltd. have been greatly appreciated.

The International Sanitary Regulations have now been revised and adoption of the new International Health Regulations by the twenty-second World Health Assembly in July will call for a new look at these Regulations.

This revision has coincided with the publication by the Board of Trade of a new International Code of Signals. A communication from the Department of Health and Social Security drew attention to this publication and stated that in the new International Code which became operative on April 1st, 1969 the 3 flag signal LIM for "I require Port Medical Officer" has been replaced by the 2 flag signal ZX. Maritime Declarations of Health issued by the Bristol Port Health Authority have been amended accordingly.

SECTION VII

SMALLPOX

1. Cases and suspected cases of smallpox occurring within the district are sent to the smallpox unit at Ham Green Hospital, Pill near Bristol.

2. Ambulance facilities are provided by the Ambulance Service of the Corporation of Bristol, which is administered by the Medical Officer of Health & Social Services.

3. Two smallpox consultants are available—Dr. J. Macrae of Ham Green Hospital, Pill near Bristol, and Dr. H. R. Cayton, Director of the Public Health Laboratory Service, Myrtle Road, Kingsdown, Bristol.

4. Facilities for the laboratory diagnosis of smallpox are available in conjunction with the Public Health Laboratory Service.

The vaccinal state of all Port Health Authority and Ambulance Service staff is subject to regular review.

SECTION VIII

VENEREAL DISEASE

Early in the year it became necessary to reassess the hours of opening of the Avonmouth Dock Clinic in the light of the existing demand and the staff available following the retirement of the Senior Clinic Attendant for whom no replacement could be found. In June therefore the Clinic's hours of opening were restricted to two hours daily—from 1400 to 1600 hours, Monday to Friday. Arrangements are being made with the Port Medical Officer for urgent cases to be seen by him at other times, i.e. weekends and public holidays. As most men attended this Clinic in the afternoons the total attendance of 412 compares favourably with previous years. An analysis is given in the following table:—

Condition	*1965*	*1966*	*1967*	*1968*	*1969*
Syphilis — Primary ...	6	4	6	4	2
— Secondary ...	1	—	1	—	—
— Latent	9	10	11	15	—
Gonorrhoea	57	66	49	70	43
Non-specific Urethritis	66	75	66	67	43
Chancroid	5	3	3	4	4
Lymphogranuloma	6	2	7	8	3
Non-venereal disease	317	261	207	304	313
Transferred from other U.K. Clinics	11	10	11	8	4
Total ...	478	431	361	480	412

In both cases of primary syphilis the infection was acquired outside the United Kingdom, one patient being a young seaman of 17 years. Of the 43 cases of gonorrhoea 3 were acquired locally, 4 within the United Kingdom and the remainder elsewhere. A recent communication from the Board of Trade confirms that the instruction given to seamen in the Ship Captain's Medical Guide on the treatment of gonorrhoea on board ship has now been revised. The recommended dosage of penicillin has been increased to 1·2 million units of procaine penicillin plus 400,000 units of benzyl penicillin given as a single treatment. Frequently patients attending the Clinic give a history of having received treatment for their condition on board ship, but seldom is a treatment record available. Similarly, it is unusual for a patient to bring a microscope slide prepared according to instructions in the Medical Guide.

Clinic cards distributed to ships by inspectors of the Port Health Authority were revised during the year. These cards now give information regarding location and times of opening of both the Avonmouth and the main Bristol Clinics. 48 seamen attended the latter Clinic during 1969. As in previous years assistance was given in tracing local contacts by a social worker attached to the Bristol Clinic. Many cases are referred to the dock clinic for investigation by the Medical Officer of the British Shipping Federation Ltd. His ready co-operation at all times has again been much appreciated.

SECTION IX

CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES ON SHIPS

No case or suspected case of cholera, plague, relapsing fever, typhus or yellow fever was seen at the port during the year.

Cases seen on vessels arriving from foreign ports are recorded in the accompanying Table D, almost half of these being diagnosed as influenza. In each instance the geographical history was carefully considered. Further details concerning the two cases of malaria are given in Section X.

SECTION X

OBSERVATIONS ON THE OCCURRENCE OF MALARIA IN SHIPS

Two fatal cases of cerebral malaria occurred in seamen arriving at the port during the year. The variable clinical course of this disease is well known. A summary of the two case reports is given below:—

Case 1.

An Asian cook aged 33 years became unwell shortly before arrival at Avonmouth. His ship had called at various West African ports including Lagos during December 1968 and January 1969. He was found to have a cough, chest pains and dyspnoea, persistent fever and a temperature of between 37·8°C and 38·4°C. He was treated with tetracycline. On 10th February was still pyrexial and confused. Hospital admission was arranged, the provisional diagnosis being bronchopneumonia. During the 7 mile journey to hospital his condition deteriorated dramatically. On arrival examination revealed an obese, unconscious Asian. The axillary temperature was 40°C, the respiratory rate was 50/min, the respiration was acidotic and the patient was sweating profusely. The pupils were dilated and non-reactive. No reflexes could be obtained. There were a few crepitations at the right base, but no other abnormal physical signs in the chest. The pulse rate was 160/min and the blood pressure 80/50 mm.Hg. The clinical picture strongly resembled salicylate poisoning. The patient's condition deteriorated rapidly and he died twenty minutes after admission before definitive treatment could be commenced. Before death blood was taken for serum salicylate estimation and haematological examination. No salicylate was present in the sample. The diagnosis of cerebral malaria was then considered and on examining the stained blood film large numbers of Plasmodia falciparum, including partially grown trophozoites, were found.

Case 2.

On the 6th March, 1969 it was reported that a Scottish Master aged 46 years on a vessel that had left Lagos on the 16th February had been found at 6.0 a.m. collapsed in his bathroom. He had left the bridge six hours earlier, but although taking Paludrine during the voyage had complained of abdominal pain and fever. When examined at sea he was sweating profusely. His temperature was 35°C, pulse rate 140/min, blood pressure 95/75 mm.Hg. and there was some degree of meningism. A provisional diagnosis of cerebral malaria was made and he was transferred to hospital. On admission he was unconscious, sweating profusely and there was acidotic breathing. The temperature was 36·6°C, pulse 130/min and the blood pressure 110/60 mm.Hg. He was pale and slightly icteric. There was also some neck stiffness. The clinical picture resembled that of salicylate poisoning. The diagnosis of cerebral malaria was confirmed, the blood film showing a heavy parasitaemia of 30-40% with Plasmodium falciparum. He also had evidence of haemolysis with a haemoglobin of 45% and renal failure with a blood urea of 230 mgm%. He was treated with parenteral chloroquine, corticosteroids, intravenous fluids, antibiotics and blood transfusion and peritoneal dialysis was started. There was no change in his condition and his blood pressure was not recordable at times. His haemoglobin rose to 66%, but his blood urea increased in spite of peritoneal dialysis. The blood film still showed malarial parasites. He was given intravenous quinine and haemodialysed. This did not make any material change to his clinical state and although his blood urea fell to 118 mgm%, his condition continued to deteriorate and he died on the 8th March.

SECTION XI

MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE

1. All vessels from infected or suspected ports are required to attach efficient rat guards to the mooring ropes.
2. Suitable lengths of tarred hessian are wrapped around mooring ropes and wires when standard type rat guards are not available, or as an additional precaution.
3. No such vessels entered the Port during the year.

TABLE D

CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES ON SHIPS

Cases landed from Ships direct from Foreign Ports

Disease	*Number of cases during the year*		*Number of ships concerned*
	Passengers	*Crew*	
Gastro-enteritis ...	—	4	4
Impetigo	—	1	1
Infectious hepatitis ...	—	1	1
Influenza	—	29	17
Malaria	—	2	2
Scabies	—	11	11
Tonsillitis	—	10	10
Total ...	Nil	58	46

Cases which have occurred on ships from Foreign Ports but have been disposed of prior to arrival

Disease	*Number of cases during the year*		*Number of ships concerned*
	Passengers	*Crew*	
	—	—	—

Cases landed from other Ships

Disease	*Number of cases during the year*		*Number of ships concerned*
	Passengers	*Crew*	
Gastro-enteritis ...	—	2	2
Infectious hepatitis ...	—	2	2
Influenza	—	37	9
Scabies	—	17	7
Tonsillitis	—	3	3
Total ...	—	61	23

SECTION XII

MEASURES TAKEN AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS

1. Rat Repression on Ships

The year has been remarkable in respect of the freedom from rodent life noted in ships from foreign ports. From a total of 1,255 vessels inspected and searched, evidence of black and/or brown rat activity (both recent and old) was seen in only 24.

Repressive measures were effected in 16 ships, from 8 of which 28 black rats were caught. Additionally, mice were noted in 11 ships and by trapping and poisoning, 13 bodies were recovered.

Liaison was maintained with other port health authorities and details of findings and action taken were forwarded to them as necessary.

Following upon searching and trapping activities which commenced in late 1968, the holds of one vessel were fumigated in January 1969, using methyl bromide gas, with only one rat being recovered. Subsequent inspections revealed no further rodent life on board.

Comparative figures for recent years of rats caught, the number of ships involved, and infestation rates are as follows:—

Year	*1964*		*1965*		*1966*		*1967*		*1968*		*1969*	
Rats per Ship	*Total Rats*	*No. Ships*	*Total Rats*	*No. Ships*	*Total Rats*	*No. Ships*	*Total Rats*	*No. Ships*	*Total Rats*	*No. Ships*	*Total Rats*	*No. Ships*
1 to 5	29	12	20	9	32	11	16	6	18	9	28	8
6 to 10	71	9	30	4	13	2	6	1	31	4	—	—
11 to 15	29	2	—	—	15	1	—	—	—	—	—	—
16 to 20	16	1	19	1	—	—	—	—	—	—	—	—
21 to 25	22	1	23	1	—	—	—	—	—	—	—	—
26 to 30	27	1	—	—	26	1	—	—	—	—	—	—
31 to 35	—	—	—	—	—	—	—	—	—	—	—	—
36 to 40	—	—	—	—	—	—	39	1	—	—	—	—
41 to 50	41	1	—	—	—	—	—	—	—	—	—	—
51 to 60	—	—	—	—	—	—	56	1	58	1	—	—
Totals	235	27	92	15	86	15	117	9	107	14	28	8

TABLE E

RODENTS DESTROYED DURING THE YEAR IN SHIPS FROM FOREIGN PORTS

Category	*Number*
Black rats	28
Brown rats	—
Species not known	—
Sent for examination	28
Infected with plague	—
Mice	13

TABLE F

DERATTING CERTIFICATES AND DERATTING EXEMPTION CERTIFICATES ISSUED DURING THE YEAR FOR SHIPS FROM FOREIGN PORTS

No. of Deratting Certificates issued						
After fumigation with		*After trapping*	*After poisoning*	*Total*	*Number of Deratting Exemption Certificates Issued*	*Total Certificates Issued*
HCN	*Other fumigant*					
—	1	—	—	1	143	144

2. Arrangements for the Bacteriological and Pathological Examination of Rodents, with special reference to Rodent Plague, including the number of Rodents sent for examination during the year.

The 28 black rats recovered from ships from foreign ports were submitted to the Public Health Laboratory Service, Bristol, for examination. All were found to be free of pasteurella pestis

see TABLE E

3. Deratting Certificates and Deratting Exemption Certificates issued during the year for ships from Foreign Ports.

One Deratting Certificate was issued after fumigation with methyl bromide gas and 143 Deratting Exemption Certificates were granted during the year.

see TABLE F

4. Arrangements in the District for Deratting Ships, the methods used, and, if done by a Commercial Contractor, the Name of the Contractor.

Deratting of ships within the District is carried out by commercial contractors, namely Rentokil Laboratories Ltd., Etoxin Ltd., and Contra-Pest Services Ltd., using hydrogen cyanide or methyl bromide gas, or sodium fluoroacetate.

SECTION XIII

HYGIENE OF CREW ACCOMMODATION

Improvements noted in recent years relating to crew accommodation, recreation rooms, messrooms, catering etc. have been evident in more and more vessels of both British and foreign flags. Much greater attention has been paid to the welfare of men at sea and recently-built ships have provided officers and men alike with bed, board and leisure facilities equal to those of any good hotel. In most new ships spaciousness of accommodation appears to be the keynote and modern design, fittings and equipment are such that there should be no difficulty in maintaining the highest sanitary standards. Even in vessels of ten to fifteen years old, facilities are generally good although somewhat cramped. Deterioration in maintenance is often noted, however, once ships leave the hands of their original owners and continue trading under flags of convenience, operating on an economic shoestring. The reluctance of the Masters of such vessels to spend a few shillings on minor repairs has often been evident and the inability of port health authorities to apply public health law, primarily due to time factors involved in the enforcement of statutory notices, is to be regretted. That such ships have been in the minority is fortunate—indeed the majority of owners, officers and agents have co-operated willingly in the rectification of defects and nuisances.

Mention was made in this Report last year of the increase of cockroach infestations seen in ships. There has been no decrease during 1969. The days have long passed when the seaman's fight against rats and vermin was generally a losing one and as mentioned earlier, conditions are now such that there is little or no reason for the verminous infestations so frequently seen in comparatively new ships. The benefits resulting from the dramatic decrease of rodent life in recent years are now being outweighed by the potential dangers inherent in cockroach infestations. It is perhaps as well that crews generally are not aware of the nightly parades of these insidious creatures in the galleys, stores and pantries of far too many ships.

Regrettably the cause of many of these infestations has been due to the good intentions of many owners who have instituted end-of-voyage disinfestation effected by contractors. The result has been a laissez-faire attitude, particularly amongst the catering staff of a ship and almost complete absence of any disinfestation whilst at sea. It is rare to find insecticide readily available in a ship and unusual to find galley staff at all concerned by obvious infestations.

During the year it was necessary for 64 ships to have full disinfestation treatment i.e. spray, dust and laquer of the accommodation, whilst in port. Far greater training and discipline of catering staff is essential if any appreciable improvements are to be achieved.

As necessary, other port health authorities have been notified of action taken in respect of defects and nuisances and their assistance sought when follow up measures have been required. Reports have also been made to the Board of Trade on matters within its jurisdiction.

SECTION XIV

PUBLIC HEALTH (SHELL-FISH) REGULATIONS

1934 and 1948

There are no shell-fish beds or layings within the jurisdiction of the Bristol Port Health Authority. The supply of shell-fish marketed in Bristol is obtained from other sources.

TABLE G

CREW ACCOMMODATION. INSPECTION OF SHIPS FOR DEFECTS AND NUISANCES

a) Primary Inspections and Revisits

Primary Inspections		*Revisits*	
British Vessels	*Foreign Vessels*	*British Vessels*	*Foreign Vessels*
652	1,000	452	428

Total Primary Inspections: 1,652 Total Revisits: 880

Total Inspections carried out: 2,532

b) Nature of Defects/Nuisances and Action taken

Nature of Defects and Nuisances	*Notices Served*						*Defects/Nuisances Found*				*Results*			
	Statutory		*Informal*		*Forward*		*British*		*Foreign*		*Remedied*		*Not Remedied*	
	Br.	F.	Br.	F.	Br.	F.	*No. Found*	*No. Ships*	*No. Found*	*No. Ships*	Br.	F.	Br.	F.
Structural Wear and Tear	—	—	25	1	5	—	65	25	2	1	51	1	14	1
Dirty Conditions	—	—	4	1	—	—	6	4	4	1	6	4	—	—
Verminous Conditions	—	—	61	38	15	5	140	61	109	38	62	102	78	7
Miscellaneous	—	—	14	8	—	—	19	14	10	8	19	10	—	—
TOTALS	Nil	Nil	104	48	20	5	230	—	125	—	138	117	92	8

c) Description of Defects/Nuisances found

	Found		*Remedied*		*Not Remedied*	
	Br.	*F.*	*Br.*	*F.*	*Br.*	*F.*
Refuse on Deck	9	6	9	6	—	—
Quayside Fouling	10	4	10	4	—	—
Defective Drainage	9	—	8	—	1	—
,, W.C. Pans	3	1	1	—	2	1
,, Flush Systems	15	—	11	—	4	—
,, Wash Hand Basins	13	—	10	—	3	—
,, Bath/Shower Fittings ...	4	—	4	—	—	—
,, Galley Fittings	9	1	6	1	3	—
,, Messroom Fittings	6	—	6	—	—	—
Dirty Storerooms	1	1	1	1	—	—
,, Messrooms	3	1	3	1	—	—
,, Galleys	2	1	2	1	—	—
,, Accommodation	—	1	—	1	—	—
Verminous Storerooms	29	25	17	24	12	1
,, Messrooms	30	26	12	25	18	1
,, Galleys	44	33	17	30	27	3
,, Accommodation	24	14	10	12	14	2
,, Alleyways	13	11	6	11	7	—
Miscellaneous	6	—	5	—	1	—
	230	125	138	117	92	8

SECTION XV

MEDICAL INSPECTION OF ALIENS AND MEDICAL INSPECTION OF COMMONWEALTH IMMIGRANTS

1. List of Medical Inspectors holding Warrants of Appointment

Dr. R. C. Wofinden, Medical Officer of Health and Social Services
Dr. J. F. Skone, Deputy Medical Officer of Health and Social Services
Dr. G. N. Febry, Senior Medical Officer (Port)
Dr. E. P. Hamblett, Medical Officer (Port) from 27.6.69
Dr. J. E. Kaye, Departmental Medical Officer
Dr. P. Tomlinson, Medical Officer (Port)
Dr. A. J. Wood, Medical Officer (Port) until 1.6.69

2. Other Staff

Nil

3. Organisation of Work

The medical inspection of aliens and commonwealth immigrants is normally carried out when a ship or aircraft is visited for health control purposes. In all other cases the Medical Inspector is summoned to the airport or seaport at the request of the Immigration Officer who meets the arriving immigrant or alien. For this purpose a rota of medical inspectors is available.

Cards explaining the medical services available in the United Kingdom have been issued to all long stay immigrants referred by the immigration authorities and immigrants' names with proposed future addresses forwarded to the appropriate Health Authority.

Although arrangements have been extended in many commonwealth countries for immigrants to be medically examined before departure no Code Cards (Form XY.) have been received from immigrants who have arrived at either the sea or air ports during the year.

4. Accommodation for Medical Inspection and Examination

When convenient medical examinations are carried out on board ship by arrangement with the Master. If this is not possible, or if a more detailed examination is required, suitable accommodation is available at both the sea and air ports.

SECTION XVI

ARRANGEMENTS FOR THE BURIAL ON SHORE OF PERSONS WHO HAVE DIED ON BOARD SHIP FROM INFECTIOUS DISEASE

The Council of the City and County of Bristol is also the Port Health Authority for the district. The ambulance and mortuary facilities of the City are therefore available for the conveyance and detention prior to shore burial of persons who have died on board ship from infectious disease.

COMMONWEALTH IMMIGRANTS ACT, 1962 & 1968

MEDICAL EXAMINATIONS

during the year ending 31st December

Avonmouth, Bristol and Portishead—Seaport
Bristol (Lulsgate)—Airport

	Seaport	*Airport*
1. Total number of arriving Commonwealth citizens subject to control under the Act	57	149
2. Total number of Commonwealth citizens medically examined	—	—

3. 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*	
	Seaport	*Airport*	*Seaport*	*Airport*
A. Suffering from mental disorder ...	—	—	—	—
B(1). Undesirable for medical reasons ...	—	—	—	—
B(2). Likely to require major medical treatment	—	—	—	—
Totals ...	NIL	NIL	NIL	NIL

ALIENS ORDER, 1953

MEDICAL EXAMINATION OF ALIENS

during the year ended 31st December, 1968

Avonmouth, Bristol and Portishead—Seaport
Bristol (Lulsgate)—Airport

	Seaport	*Airport*
1. Number of arriving ships/aircraft carrying aliens	163	*
2. Total number of arriving aliens (excluding crews)	327	2,661
3. Total number of aliens medically examined	3	—

4. Reports and certificates for aliens medically examined:—

Nature of report or certificate	*Total number of reports and certificates issued*		*Aliens NOT PERMITTED to land*	
	Seaport	*Airport*	*Seaport*	*Airport*
A. Unsound mind or mentally defective	—	—	—	—
B(1). Undesirable for medical reasons ...	—	—	—	—
B(2). Inability to support	—	—	—	—
Likely to require medical treatment	—	—	—	—
C. Conditionally landed for further medical examination	—	—	—	—
Totals ...	NIL	NIL	NIL	NIL

* Figure not available

SECTION XVII

IMPORTED FOODS

776,371 tons of foodstuffs were imported through the port of Bristol during 1969. This consisted of 522,384 tons of wheat, an increase of 142,572 tons over the previous year, and 253,987 tons of a wide variety of foods from many countries. Cocoa, coffee and tea from Africa, India and Ceylon, frozen meat from New Zealand and canned goods of all descriptions from Africa, Europe and the Americas formed the bulk of the imports. Frozen cakes from Canada, sausage casings, walnuts and various delicacies from China, coconuts from Ceylon, citrus fruits from Cyprus and Israel, prawns from the Persian Gulf and dried egg from the United States all made interesting contributions to a total which exceeded the 1968 figure by some 183,000 tons.

Every effort has been made to carry out a preliminary inspection of all foodstuffs at the time of off-loading, followed by more detailed examination and sampling upon completion of landing, but palletisation and containerisation of cargoes has resulted in an increased number of consignments being delivered direct from ship to local or inland warehouses and cold stores. The consequent decreased usage of transit shed and port warehouse storage has of necessity made significant changes in inspection procedure. When possible complete inspection routine is carried out before foodstuffs leave the dock area, but in many instances this work has been undertaken within the expanding warehouse accommodation in Avonmouth and Chittening. When necessary forward examination procedures as laid down in the Imported Food Regulations, 1968 have been applied.

The introduction of these somewhat revolutionary methods of carriage of goods (the use of containers and other forms of pre-packing) has demanded a re-assessment of dock handling methods with an overall emphasis upon speed of transit. In the absence of any suspicion that foods are unsuitable for admission into the country, delay incurred by full examination would be unjustified. When deferred inspection has been inevitable the receiving health authority has been fully notified in accordance with the provisions of the Imported Food Regulations. Authorised officers concerned with this work have been conscious of the weaknesses associated with deferred food inspection. Varying standards inevitably lead to less comprehensive and effective inspection and, perhaps due to the overwhelming quantities involved, some port health authorities appear unable to conform to the Regulations.

There has been little cause for complaint throughout the year regarding the handling, transport and storage of general foodstuffs, meat and meat products. Where minor transgressions have occurred they have been readily rectified. Ample facilities have been provided throughout the docks for hand washing, and protective clothing i.e. aprons, overalls, and covering for footwear has been readily available.

Food Sampling

Sampling of imported foodstuffs during 1969 has been carried out as follows:—

(i)	For Bacteriological Examination	603 samples
(ii)	For Chemical Examination	827 samples
	Total	1,430 samples

One chest of Indian tea was confirmed on chemical analysis as being grossly adulterated with silica (as sand). The one-time practice of adding make-weights in some form or other has long since vanished and this particular adulteration was inexplicable.

With over a quarter of a million tons of widely differing foodstuffs passing through the port during the year the fact that 1,429 specifically-taken samples—i.e. samples drawn from consignments which may reasonably be considered as "suspect"—were entirely suitable for human consumption indicates a high standard of purity obtained not only by overseas producers, but also by importers whose insistence upon quality (as related to compliance with U.K. food standards legislation) has been continuously evident.

One example of false labelling was noted. The label on Chinese Monosodium Glutamate informed the user that by adding only water, chicken soup would result! Monosodium glutamate is a synthetic derivative of glutamic acid and is used in food preparation to impart a meat flavour. Appropriate action was taken to deal with the false label.

The following Table shows those countries from which food was received in this Port and which was subjected to chemical and/or bacteriological examination, the number of samples drawn and the principal commodities concerned.

Country of Origin	*Principal Commodities*	*No. of Samples*
Argentine	Canned Meats	16
Australia	Canned Meats, Canned Fruit	63
Belgium	Canned Meats, Canned Vegetables	2
Bulgaria	Canned Vegetables	3
Canada	Fresh Fruit, Dried Vegetables, Canned Vegetables and Fruit ...	33
Ceylon	Desiccated Coconut, Tea	141
China	Chinese Foods, Canned Meats	13
Czechoslovakia	Canned Fruit, Canned Meats	4
Denmark	Canned Meats	11
Eire	Canned Meats, Conserves, Confectionery	19
Germany	Dried Vegetables	3
Holland	Canned Meats, Canned Fruit, Canned Vegetables	98
Hungary	Canned Meats, Canned Vegetables	13
India	Tea	44
Cyprus	Fresh Fruit	2
Israel	Canned Fruit, Fresh Fruit, Canned Fruit Juices	40
Italy	Canned Tomatoes	69
Japan	Canned Oranges, Canned Fish	145
Kenya	Canned Meat, Canned Fruit	69
Malaya	Canned Pineapples	33
New Zealand	Canned Fruit, Canned Vegetables	10
Portugal	Canned Sardines, Canned Tomato Products	3
South Africa	Canned Fruit, Meat, Vegetables, Fish, Dried Fruit	235
Spain	Fresh Oranges, Canned Vegetables	13
Switzerland	Conserves	4
West Indies	Canned Fruit and Fruit Juices	2
U.S.A.	Dried Egg, Frozen Foods	38
Other European	Canned Meats, Conserves	11
Other African	Tea, Cocoa Products, Canned Fruits, Canned Meats	252
Other Asian	Frozen Fish	24
Other American	Canned Meats	17
	TOTAL	1,430

The friendly co-operation established over the years between authorised officers of the Authority and the importers, agents, insurance surveyors and others, has enabled problems relating to the disposal of consignments which at the time of landing are not suitable for use, to be dealt with on an informal basis. Informal action coupled with strict control regulating subsequent disposal, has been found entirely adequate in safeguarding the public against unsound food.

The detention and destruction of imported food has been related mainly to foodstuffs physically damaged or otherwise affected during transit. Canned goods for example that are crushed, badly dented or leaking are unsuitable for sale and after being rendered useless have been disposed of under supervision. Damage to bulk commodities, i.e. bags of flour, cocoa, coffee beans, chests of tea, lamb carcases, etc. has often been of a partial nature, e.g. condensation in the hold of a ship affecting only part of a carton or bag. In these circumstances it has sometimes been possible to salvage a proportion of sound food by reconditioning, or alternatively render the damaged food fit for animals or for other industrial use. When reconditioning or industrial usage was envisaged the person having control of the consignment has given a written guarantee indicating his disposal intentions. If this has been effected outside the City of Bristol the Medical Officer of Health concerned has been notified and sent a copy of the guarantee. Additionally no damaged food has been released until enquiry has been made concerning satisfactory reconditioning facilities.

No difficulties have arisen with this work and in all a total of 730 tons of damaged foodstuffs were detained during the year. Of this figure 647 tons were allowed to be reconditioned or to go for industrial usage whilst the balance of 83 tons was destroyed.

Imported Meat

a) Fresh Meat

Almost all fresh meat imports passing through Avonmouth Docks are of New Zealand origin, with small consigments from Australia, Canada, and South and West Africa.

28 shipments were imported during 1969, providing 25,416 tons of meat for the British market. Regrettably not all was fit for human food at the time of arrival and the following details illustrate the need for constant vigilance in the field of imported meat inspection.

On the 8th May, 1969 the refrigerated vessel "Port Pirie" commenced the discharge of 61,981 lamb carcases (826 tons) from New Zealand. The meat from No. 2 and No. 3 holds was received in a clean, sound, well-frozen condition. In No. 1 lower hold it was noted that some carcases were sticking together on the top of the stow, but there was no evidence of mould or decomposition. As discharge from this lower hold continued, however, decomposed and mouldy carcases came to light. Many were squashed and stuck together in blocks of 3—5 necessitating the use of crow bars to remove them from the hold. Detailed inspection was, therefore, necessary and on account of the warm humid conditions prevailing at the time, it was not practical to undertake this work in the nearby transit shed. Discharge from the hold ceased until suitable arrangements had been made for all carcases to be taken to the St. Andrew's Cold Store, Avonmouth where they remained under detention. 100% examination of the 9,681 carcases was carried out in the Cold Store. This involved two inspectors full-time for nine days at the end of which 195 lambs, 2% of the total inspected, were set aside as mould infected and/or decomposed. Of this number, it was possible to save 30 carcases by trimming but 165 (2 tons) were in such bad condition that they were unfit for human food and were destroyed.

Although the "Port Pirie" was the first refrigerated vessel in 1969 having mouldy decomposed carcases on board, the early months of the year did reveal a marked deterioration in the condition of lambs arriving from New Zealand. Many squashed and distorted carcases were seen which led to the suspicion that they were loaded soft in New Zealand and had only been prevented from becoming mould-affected by the efficiency of the ships' refrigeration systems at the time of loading. An example of this was to be found on the "Medic" in March, when in No. 5 lower hold almost all the lambs in the lower twelve tiers were stuck together, and had to be removed with crowbars, causing quite unnecessary damage. Carcases in the bottom tiers were badly mis-shapen, flattened and distorted but all were free of mould. This hold was, however, air-cooled whilst the No. 1 hold of the "Port Pirie" was refrigerated by a direct expansion system which, whilst satisfactory for the reception of hard-frozen carcases, is not sufficiently sophisticated to cope with high-temperature soft lambs.

In September, 1969, the "Delphic" discharged a cargo of New Zealand lambs at Avonmouth. A large number of carcases in the lower 'tween deck of No. 2 hold were found to be contaminated with dirt and in a foul condition. The cause of this trouble was not clear, but it was evident that a considerable amount of dirty water had contaminated the lower tier of the stowage, finally freezing and embedding the lambs. The carcases were in such a contaminated condition that there was no hope of reconditioning and 91 were therefore destroyed.

b) Hog Casings ex Republic of China

Ten barrels of salted Chinese Hog Casings were landed at Avonmouth in February. They were part of a consignment of 68 barrels originally discharged at Rotterdam and transhipped to Avonmouth. No official certificate accompanied the import, but a photostat copy of the certificate required by the Dutch authorities was submitted. In accordance with part III of the Imported Food Regulations, the consignment was detained and reference made to the Ministry of Agriculture, Fisheries and Food who later confirmed that only the documentation was inadequate. In all other respects the requirements of the Regulations had been fulfilled. The hog casings were, therefore, released for unrestricted use.

FOODSTUFFS DESTROYED

Description	*Principal Causes of Destruction*	*Weight in tons*
Frozen Meat	Decomposition; mould; bruising; dirt contamination; foul dock water contamination	4
Canned Goods	Crushed; burst; leaking tins. Metallic contamination ...	44
Fresh Fruit	Cases and contents crushed	½
Other Foods (Bagged and Cartoned Commodities)	Wet and mould damage; excessive dirt contamination; taint (in respect of tea); insect infestation	35
	TOTAL	83½

SECTION XVIII

OTHER MATTERS

1. Rodent Control on Docks, Quays, etc.

Rodent control has been satisfactorily maintained at both Avonmouth and the City docks and at Chittening Trading Estate. No unexpected or significant infestations have arisen and regular searching, baiting and trapping programmes have proved efficacious.

At Avonmouth Docks all but one of the eight provender mills have been serviced by Departmental staff. The ready availability of rodent control officers to deal with reports of rats seen, coupled with their knowledge of rodent life in adjacent buildings and land has enabled much more effective action to be taken than in past years when private pest control firms were concerned only with isolated problems.

Two provender mills with extensive underground tunnelling and drag-lines have provided the main foci of rat life at Avonmouth. Although repressive measures have minimised and indeed contained the rodent population concerned, it appears unlikely that complete elimination will ever be effected.

A small number of mice have been caught during the year, the principal cause of infestations being the storage of bagged grass seed in transit sheds. Bagged seed kept in transit sheds for 2-3 weeks invariably harbours mice which are extremely difficult to eradicate. The dangers of salmonella contamination of foodstuffs stored in these transit sheds cannot be overlooked and efforts have been made to achieve more rapid handling and disposal of the grass seed.

Rodents Destroyed in Docks, Quays, etc. during 1969

	Black Rats	*Brown Rats*	*Mice*
Avonmouth Docks	645	87	67
City Docks	—	6	32
Chittening Estate	—	—	15
Total	645	93	114

No. of Rats submitted for Laboratory Examination and found free of Pasteurella pestis	104

A survey of 74 barges using the Avonmouth and City Docks was undertaken during the year. 2 were found to have only minor evidence of rat life aboard, but a third was heavily infested. This vessel, a grain barge, was clearly offering ideal accommodation for rats and defied treatment by trapping and poisoning. Eventually the barge was fumigated, using methyl bromide gas, following which the rat life disappeared. In all a total of 30 rats were recovered from the 3 barges. A further 9 black rats were destroyed by trapping on 2 floating grain elevators.

2. Dock Hygiene and Sanitation

Mention must again be made of the rough usage given to the numerous sanitary blocks situated throughout the docks and particularly of the theft of fittings from them, often trivial in nature, but important to the proper functioning of the convenience. This deplorable vandalism has again given unnecessary trouble to the Port Authority who have maintained these facilities.

Two new Amenity Blocks were built during the year, one in No. 3 Granary and the other near the main dock entrance. Both appear well-planned and include toilets, dressing rooms, wash basins and showers, thus providing the dock worker with every toilet facility that he could wish for. A third amenity block is to be built at the West Wharf.

Occasional shortage of labour coupled with bad weather conditions have from time to time given rise to complaints regarding the condition of the quaysides fouled by spillage of animal feeding stuffs, phosphates, etc. Every effort has been made by section foremen to deal with these matters and the overall sanitary condition of the docks has been satisfactory.

The collection of refuse from ships and dock installations has been undertaken satisfactorily throughout the year with only occasional minor disruptions, due to the careless siting of refuse bins. Alternative disposal arrangements made during the strike of refuse service personnel in October prevented the creation of any noxious or rat-attracting accumulations.

A marked improvement has been made in several dock areas where tarmac has been laid upon ground that was uneven, undrained and easily fouled by spillage.

3. Canteens within Dock Areas

Only the Central Canteen at Avonmouth Docks has failed to maintain the consistently high standards noted in all the other dock canteens both public and private. It has frequently been necessary to draw to the attention of the establishment's management the inadequate cleaning proceedures, improperly cleaned cutlery and the use of unsuitable bakery equipment. Improvement was evident towards the end of the year, however, and the provision of new tables and chairs in the main mess hall was welcomed.

4. Avonmouth Docks Trading Estate

This estate has considerably increased in size in recent years; new warehouses have been completed and occupied whilst others are under construction. This vast warehouse accommodation and the establishment of the West of England Freight Terminal has considerably increased the food inspection duties of the Authority's officers. Much traffic has been consigned either direct ex-ship from Bristol docks to these warehouses or is received there in containers from other ports.

5. Factories

Only minor irregularities have been noted in the 24 factories situated within the docks and the Docks Trading Estate. These have all received early attention from managements upon request.

6. Clean Air Act, 1956

The provisions of the Dark Smoke (Permitted Periods) (Vessels) Regulations, 1958 have been consistently applied throughout the year. Negligence in engine room procedure and lack of officer supervision were found to be the main reasons for the emission of black and/or dark smoke, thus enabling remedial measures to be effected quite rapidly.

25 informal and 2 formal notices were served, producing the desired effect without need for recourse to legal proceedings.

7. Animal Feeding Stuffs

During 1969 a total of 327 samples of animal feeding stuffs were taken from the 8 provender mills in Avonmouth Docks under the provision of the Fertilisers and Feeding Stuffs Act, 1926. 45 samples initially failed to satisfy the compositional requirements of the Act and Regulations, giving a failure rate of 13·7%, but all were found satisfactory upon repeat sampling.

8. Dust Nuisances

The year has seen a marked increase in the amount of dust evident within the dock areas. There have been two main causes—firstly the discharge of bulk commodities such as rapeseed where the particle size is too small to be properly dealt with by dust extraction units of the suction plants and secondly the high loading of uncovered lorries transporting these commodities throughout the dock from berth to mill. Examination of Section 92(1)(d) of the Public Health Act, 1936 reveals that legal action may be taken only if the nuisance affects the "inhabitants of the neighbourhood." Without "inhabitants" as defined in the Act, as is Avonmouth Docks, there is no legal provision for the protection of dock workers from atmospheric polution caused by dust.

9. Noise Abatement Act, 1960

Noise is the constant companion of those working in the docks and with present methods and equipment it appears difficult to minimise. It is desirable that manufacturers of mechanical equipment should give heed to the reduction of noise.

Measurements taken near fork lift trucks have revealed sound pressure levels of over 100 decibels. These vehicles are often used within enclosed spaces for lengthy periods thus producing a noise environment known to affect hearing.

Numerous complaints have been received during the year regarding the noise produced by pneumatic drills within the dock. On no occasion had contractors concerned taken steps to reduce noise by fitting muffs to the drills. While individual susceptibility to hearing damage or other disturbance is varied, it is clear that noise as a factor in the human environment has in many situations been allowed to increase to an undesirable extent. Remedial means, however belated, must in these cases be put into effect. Whereas this is being done in some instances, it may well be necessary to consider legal action against offenders in the future.

P&S DEPT. R276