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PORT OF LIVERPOOL



ANNUAL REPORT

OF THE

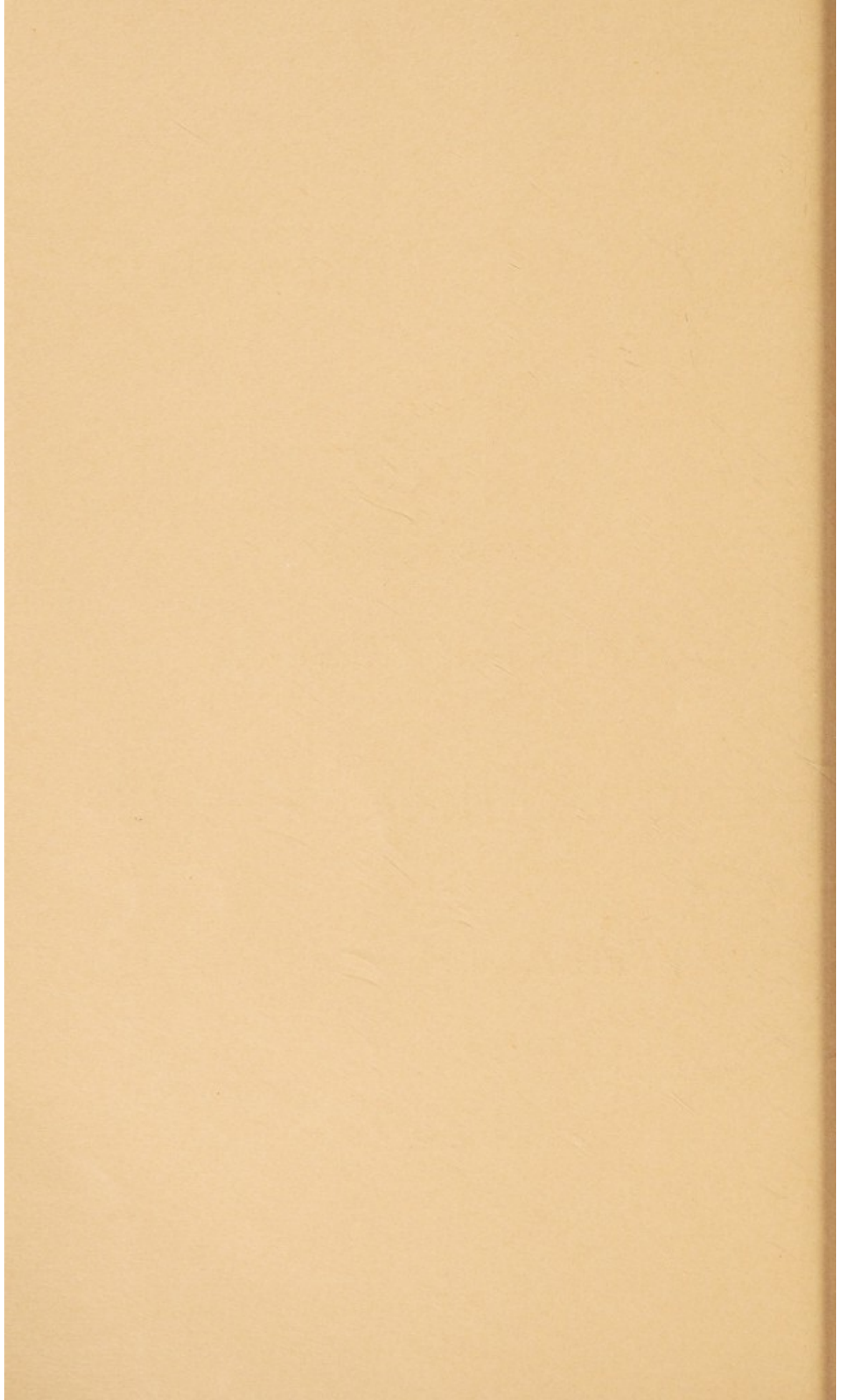
MEDICAL OFFICER OF HEALTH

TO THE

PORT HEALTH AUTHORITY

FOR THE YEAR

1959



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PORT HEALTH AUTHORITY

OF

LIVERPOOL.

REPORT FOR THE YEAR 1959

BY THE

MEDICAL OFFICER OF HEALTH

This is the 87th Annual Report upon the work of the Liverpool Port Health Authority.

The Permanent Constitution of the Liverpool Port Health Authority defines the limits of the port for health purposes, as coincident with the limits laid down by H.M. Customs. By "The Appointment of the Port of Liverpool Order, 1956", the port of Liverpool is "An area bounded by a line:

(1) commencing at the termination of the port of Chester, namely at Hilbre Point (which is referred to as the Red Stones in Hoylake on the Point of Wirral in the Treasury Warrant dated 16th December, 1847, appointing the port of Chester): and

(2) continuing up the River Mersey on the Cheshire shore to Ince Ferry the western termination on the Cheshire shore of the port of Manchester, but excluding (where it touches the port of Manchester) so much of the Eastham Channel in the River Mersey as is enclosed by an imaginary line drawn in the line of dolphins on the east side of the Eastham Channel and, at a distance of five hundred and thirty-eight yards from the seaward extremity of the eighty feet lock at Eastham, a further imaginary line to the foreshore at right angles to the first line: thence

(3) crossing the River Mersey in a supposed straight line to Dungeon Point being the western termination on the Lancashire shore of the port of Manchester: and

(4) continuing along the coast of the County of Lancaster to the southern boundary of the port of Preston, namely an imaginary line drawn in a true north-west direction from the inner north-west sea mark on the beach at Formby Point shown in the Admiralty chart of Liverpool Bay dated 9th July, 1954.

The port shall include all islands, rivers, bays, channels, roads, bars, strands, harbours, havens, streams, and creeks (except the Manchester Ship Canal) within the specified limits and shall extend seaward to a distance of three miles from low water mark along the coast within the specified limits."

Circular 33/52 of the Ministry of Health, dated 6th November, 1952, requests that "The Medical Officer of Health shall prepare his Annual Report for 1952 on the lines indicated in Form Port 20".

Form Port 20 reads as follows:—

PORT HEALTH AND RIPARIAN AUTHORITIES.

ANNUAL REPORTS OF MEDICAL OFFICERS OF HEALTH.

(1) Article 12 (4) of the Public Health Officers (Port Health Districts) Regulations, 1959, provides that a Medical Officer of Health shall, as soon as practicable after the 31st day of December in each year, make an Annual Report to the Port Health Authority for the year ending on that date on the sanitary circumstances, the sanitary administration, and the vital statistics of the port health district, containing, in addition to any other matters upon which he may consider it desirable to report, such information as may from time to time be required by the Minister, and furnish the Minister with as many copies of such report as the Minister may from time to time require.

(2) Article 21 (15) of the Regulations provides that the Public Health Inspector shall, as soon as practicable after the 31st day of December in each year, furnish the Medical Officer of Health with a tabular statement containing the following particulars:—

- (a) The number and nature of inspections made by him during the year;
- (b) The number of notices served during the year, distinguishing statutory from other notices;
- (c) The result of the service of such notices.

(3) The Records of the Authority should accordingly be kept in such form as to enable their Medical Officer of Health to prepare his Report without delay at the close of each year. The report should be in the form and sequence indicated herein—the lettering of the tables being adhered to.

(4) The Medical Officer of Health should include in his Report any comments which he may think desirable

- (1) under the headings shown; and
- (2) on the need for any development which he considers necessary for efficient administration.

The above-mentioned directions have been followed in the compilation of this report.

SECTION I. STAFF.

TABLE A

Name of Officer	Nature of Appointment	Date of Appointment	Qualifications	Any other Appointments held
Professor Andrew B. Semple	Medical Officer of Health	5.12.52	V.R.D., M.D., Ch.B., D.P.H.	Medical Officer of Health, City of Liverpool. Professor of Public Health, University of Liverpool. Supervising Medical Inspector of Aliens.
Dr. J. B. Meredith Davies	Deputy Medical Officer of Health	1.5.53	M.D., B.S., D.P.H.	Deputy Medical Officer of Health, City of Liverpool. Medical Inspector of Aliens.
Dr. T. L. Hobday	Senior Medical Officer	19.6.58	M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H., D.P.A.	Medical Inspector of Aliens.
Dr. J. B. McFarland	Assistant Medical Officer	7.7.58	M.B., Ch.B. (Resigned 16.5.59)	Medical Inspector of Aliens.
Dr. A. J. Graham	Assistant Medical Officer	12.6.59	L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.H.	Medical Inspector of Aliens.
J. F. Ward	Administrative Assistant	1.5.35	Oxford Local, 1909. (Retired 1.5.59)	None.
G. M. Gillies	Administrative Assistant	6.5.59	L.G.E.B., Promotion Examination, 1948.	None.
J. G. McCoy	Chief Port Health Inspector	7.6.47	R.S.I. Sanitary Inspector's Certificate: Liverpool University School of Hygiene Sanitary Science and Meat, etc. Certificates: B.O.T. 1st Mate's Foreign-going Certificate.	None.
J. J. T. Moulds	Chief Port Food Inspector	21.2.47	Liverpool University School of Hygiene (Meat and Food) Certificate, 1921.	None.

The Staff also includes:

A Deputy Chief Port Health Inspector, four Port Health Inspectors, and twelve Rodent Operatives;

A Deputy Chief Port Food Inspector, and five Port Food Inspectors;

One Clerical Officer and one Shorthand Typist.

SECTION II

TABLE B

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR 1959

Ships From	Number	Tonnage	Number Inspected		Number of ships reported as having, or having had during the voyage, infectious disease on board
			By Medical Officers	By Port Health Inspectors	
Foreign Ports...	5,940	13,483,311	474	4,788	144
Coastwise ...	5,251	3,709,734	1	189	6
TOTAL ...	11,191	17,193,045	475	4,977	150

SECTION III

TABLE C

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

PASSENGER TRAFFIC

No. of passengers INWARDS	No. of passengers OUTWARDS
203,426	194,927

(These figures do not include traffic between Liverpool and Northern Ireland.)

CARGO TRAFFIC

Principal Imports	Principal Exports
Flour, grain, etc., sugar, molasses, etc., wood, fruit and vegetables, cotton, ores and scraps, meat, feeding stuffs for animals, tea, butter, cheese, eggs, etc., cocoa, seeds or nuts for expressing oils, copper, coal, oils, fats, resins and gums, hemp, jute, sisal, etc., hides and skins, tobacco, rubber.	Iron and steel manufactures, chemicals and sodas, salt, machinery, pottery, glass and glassware, sugar, molasses, etc., flour, grain, etc., copper, brass, tin, etc., soap and oils, etc., ale, beer, wine, spirits, etc., cement, electrical goods, etc., paper, cardboard, etc., vehicles, aircraft, motor cars, locomotives, etc., bricks, cutlery, hardware, etc., fine goods.

Principal ports from which ships arrive. Ships arrive in Liverpool from ports all over the world.

SECTION IV

INLAND BARGE TRAFFIC

The number of barges plying in and about the Port of Liverpool is approximately 400 with an estimated tonnage of 70,000 tons.

CANAL BOATS (Public Health Act, 1936, Part X)

A port health inspector is engaged periodically on the inspection of canal boats plying in the river or docks.

No. of boats inspected	...	...	...	...	347
No. of boats with contraventions	...	...	...	...	9
No. of contraventions	...	...	...	...	11
No. of contraventions corrected	...	...	...	...	11
No. of boats inspected for registration	...	...	...	...	—

SECTION V WATER SUPPLY

(1) There has been no change in the source of supply for either the port health district or for vessels within the port.

(2) The Port Health Authority has continued to investigate the cleanliness of ships' drinking water. The number of routine samples taken from ships entering the port has been increased as a result of last year's findings and in addition the masters of foreign-going vessels have been requested to enter, on the Maritime Declaration of Health, the names of ports where drinking water has been taken.

During the year 279 samples of drinking water were taken from 42 ships and submitted for bacteriological examination: 87 samples were considered unsatisfactory and the vessels concerned were subject to continued inspection until a satisfactory result was obtained.

(3) Hydrants and hosepipes continue to be regularly inspected.

(4) There are no water boats in regular service in the River Mersey. There are two tenders which are equipped for carrying water in special circumstances. These are regularly inspected.

SECTION VI PUBLIC HEALTH (SHIPS) REGULATIONS, 1952

(1) LIST OF INFECTED AREAS.

The list of infected ports is as follows:—Rangoon, Dar-es-Salaam, Rio de Janeiro, all ports in China, Indo-China, India, Pakistan, Belgian Congo, Liberia, Nigeria (including British Cameroons), Ghana, Colombia, and Ecuador. Following the notification of a smallpox outbreak in Singapore in April, this port was added to the list of infected ports, and all ships arriving from Singapore were boarded in the river, before docking, by medical officers. This port was removed from the list of infected ports in December.

(2) Incoming vessels from infected ports are required to notify their time of arrival by radio, signals to be sent not less than four hours before arrival in the river. Normally this signal is sent when the Mersey Pilot boards the vessel off Anglesey. Further information concerning the movements of such a ship is relayed by the Port Radar Station, which receives information from the river pilots' portable short-wave radio. Suitable arrangements are then made between the medical officer and the master of the boarding tender, and the medical officer boards and inspects the vessel as it enters the Mersey.

The port health tender, which is chartered from the Liverpool Fire Service, is the vessel "William Gregson" which is equipped with two-way radio, emergency medical supplies, and a cradle designed to assist in the transshipment of sick persons.

(3) NOTIFICATIONS OTHER THAN BY RADIO.

Many shipping companies notify the arrival of their vessels by letter or telephone. This has not been found to be always reliable and radio messages from incoming vessels are insisted upon.

(4) There has been no change in the mooring stations allotted for the examination of shipping.

The number of ships visited by the boarding medical officers during the year was 475, of which 286 were from infected ports.

By arrangement with Manchester Port Health Authority, vessels bound for Manchester from infected ports are examined by the Liverpool Port Health Authority in the river. During 1959, 63 of the vessels boarded were bound for Manchester.

(5) (a) Cases of infectious diseases, other than quarantinable diseases, are accommodated in Fazakerley Isolation Hospital.

(b) There has been no change in the method of surveillance and follow-up of contacts of infectious diseases.

(c) Any disinfection which may be required in ships is done by inspectors of the Port Health Authority. During 1959, 89 disinfections after infectious disease were carried out. Infected beds and bedding were removed for steam disinfection.

PUBLIC HEALTH (AIRCRAFT) REGULATIONS, 1950

Liverpool is served by a major airport at Speke, 9 miles from the City centre. The Port Health Authority is responsible for enforcing the above regulations in the airport. Passenger aircraft arriving at the airport come from other airports within the United Kingdom, Eire, and the Continent, and few aircraft arrive directly from infected areas. An examination room is maintained in the main airport building, and the medical officers on the Port staff who hold appointments as Medical Inspectors under the Aliens Order, are available at the request of the Immigration Authorities to conduct inspections of persons arriving by air. All passengers arriving from an infected area are inspected and the validity of their medical certificates ascertained.

Forewarning of such aircraft is given by H.M. Customs to the Port Health Authority and later information is supplied directly from Aircraft Control in the airport.

Indian crews for merchant ships are frequently flown from India to join ships in the United Kingdom. In some cases these men arrive by air elsewhere, normally London, and proceed to Liverpool to join their ship: notification of this is always received from the Airport Medical Officer. On occasions, chartered aircraft bring the crews directly to Liverpool.

Such arrivals are kept under daily surveillance here until either the vessel sails or until the incubation periods for quarantinable diseases have expired.

SECTION VII**SMALLPOX**

Cases of smallpox from the port area are sent to New Ferry Isolation Hospital.

Cases of smallpox are disembarked in the river by tender, and conveyed to Wallasey Cattle Stage, from which ambulance transport to the hospital is supplied by Liverpool City Ambulance Service. The Medical Officer of Health is responsible for the vaccinal state of the ambulance crews.

Smallpox consultants available are:—

Professor Andrew B. Semple, Medical Officer of Health.

Dr. E. R. Peirce.

Dr. A. B. Christie, Liverpool Regional Hospital Board.

Facilities for laboratory diagnosis of smallpox are available in the Liverpool University Bacteriological department.

No case of smallpox occurred on a ship entering the port during the year: one case diagnosed in a suburb of Liverpool in March, 1959, caused widespread investigation of shipping. The circumstances were these: a student, who was attending the surgical practice of a hospital adjacent to the dock area, developed a rash and was diagnosed as variola major. This was subsequently confirmed by laboratory examinations. Prolonged and searching investigations failed to reveal the source of the infection, though it was clear that this student had attended the hospital in question on the day when he was infected. It is quite common for sick or injured men from ships in port to be treated in the casualty department of this hospital, and a complete list was drawn up of everyone from the port area who had attended either the casualty or out-patients' departments at the relevant time. All these men were either visited or followed up by letters to other Authorities but no helpful information was discovered. In addition to the above, particular attention was paid to any ships which were in this port at the time of the infection and which had come from smallpox areas. No further cases occurred, and the source of the infection remains unknown.

A large passenger liner from New York landed a sick man in Le Havre in May. The diagnosis was suspected smallpox, and the crew of the liner, which was bound for Southampton, were mostly Liverpool men. They were all visited on arrival in Liverpool, but the later negative laboratory findings in Le Havre made further precautions unnecessary.

A vessel from Calcutta landed a sick man in Plymouth in September. It appeared that smallpox was a probable diagnosis, and, as the crew were principally Liverpool men and likely to return home after the ship had paid off in London, provisional arrangements were made to protect their families by vaccination before the arrival of the men. These arrangements were, however, cancelled when the laboratory findings did not support the provisional diagnosis.

SECTION VIII

VENEREAL DISEASE

Venereal infection aboard ships remain at a low level: 11 cases were examined aboard 7 vessels arriving in the port during the year. These were all referred for treatment to the Seamen's Dispensary.

SECTION IX**CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES IN SHIPS**

No cases, or suspected cases, of cholera, plague, relapsing fever, smallpox typhus, or yellow fever occurred in the Port during 1959 : a case of smallpox diagnosed in the city and which led to an investigation of shipping in the Port is discussed under Section VII.

Poliomyelitis

A signal was received from an incoming vessel in December which did not carry a surgeon, that a member of the crew was ill with poliomyelitis. Further signals, received as the ship was approaching Liverpool, suggested that the respiratory muscles were seriously affected. Arrangements were accordingly made, with the co-operation of the Medical Officer of Health for Holyhead, for the vessel to enter Holyhead harbour and disembark the case there. This was done and the patient was admitted to an isolation hospital in Caernarvon, where he unfortunately died the next day.

Many of the crew of the vessel returned to their homes after the ship docked in Liverpool, and letters were sent to the appropriate medical officers of health informing them of the circumstances. Personnel remaining aboard the ship in Liverpool were visited daily during the incubation period of the disease. No further cases were reported.

The quarters, used by the sick man, were disinfected in Liverpool, and specimens of drinking water were taken and submitted for virological examination. No positive findings were made.

Immunisation Against Poliomyelitis for Seafarers

In the course of the general campaign for immunisation against poliomyelitis, a special approach was made to seafarers. All shipping companies and agents were circularised in May, and the suggestion was made that where ships carried surgeons the first injection could be given in Liverpool, while second and third injections could be given at the appropriate times when the vessel was at sea, provided efficient refrigeration facilities were available. Many companies took advantage of this, and an additional clinic was opened in the Pier Head office of the Port Health Authority.

Food-Poisoning

Several ships entering the port reported illness during the voyage suggestive of food-poisoning. Samples of food and water were taken from these vessels and, where appropriate, samples of faeces and rectal swabs were obtained and submitted for bacteriological examination. All the tests were negative.

In July a passenger vessel from West Africa arrived in the port and reported cases of severe diarrhoea during the voyage. Two passengers were removed for observation to Fazakerley Hospital, where bacteriological tests were negative. Two samples of food from the ship were found to contain staphylococcus pyogenes in small numbers and four samples of water showed bacterial contamination. The water supply was rendered clear after chlorination.

In August, a large passenger vessel about to be used for transportation of troops reported several cases of enteritis and it was decided to investigate all members of the catering department. In all, 208 rectal swabs were taken and examined with no significant bacteriological findings. Six samples of drinking water were tested and one from a pantry tap was unsatisfactory. The tap was removed, sterilised, then replaced and further samples from this source were satisfactory.

Anthrax

An analysis was made of the sampling results obtained at the end of 1958. Samples consisted of hairs and scrapings from imported hides. In all, 1,053 samples were taken. Sixty-four were from Argentine cattle, 532 from East African cattle, 144 from West African cattle, 250 from West African goats, and 63 from West African sheep. Hides are divided by the trade into grades—1, 2, and 3 in descending order of quality—and samples from each grade were examined separately within each of the major groups. The final collated results were:

	Samples taken	Number positive for anthrax	Per cent positive for anthrax
ARGENTINE CATTLE			
Grades 1 and 2 mixed	64	2	3.1
EAST AFRICAN CATTLE			
Grade 1	147	11	7.5
Grade 2	169	21	12.4
Grade 3	216	34	15.7
WEST AFRICAN CATTLE			
Grade 1	76	35	46.1
Grades 2 and 3	68	14	20.5
WEST AFRICAN GOATS			
Grade 1	92	28	30.4
Grade 2	75	28	37.3
Grade 3	83	33	39.7
WEST AFRICAN SHEEP			
Grade 1	17	8	47.0
Grade 2	25	16	64.0
Grade 3	21	6	28.6

The anthrax organism is thus widespread in imported hides, and it is likely that at least one hide in four is contaminated. The cleanest hides seem to be those from Argentine cattle (3.1 per cent. contaminated), while the most dangerous are those from West African sheep (48 per cent. contaminated). Commercial grading is unrelated to the incidence of anthrax infection.

It appears a reasonable conclusion that while the organism is very widespread it is not readily able to attack human tissues, whose resistance is presumed to be greater than hitherto accepted.

Accordingly, it seems that active immunisation may be a more rational approach to the problem than the extension of physical precautions alone, and discussions are at present proceeding to see whether this can be arranged for workers particularly exposed.

Psittacosis

A veterinary surgeon was asked, in September, to examine a sick parrot which had been brought to Liverpool by a member of the crew of a ship from the Amazon. The parrot later died and the cause of death was considered to be psittacosis. Other parrots, confined in the ship with the sick bird, were traced and the medical officers of the areas concerned were notified. Everybody who had been in contact with the parrot was kept under

surveillance, either by officers of the Liverpool Health Department or, where appropriate, by arrangement with adjacent authorities. The space in the ship which had accommodated the parrots was disinfected by Port Health inspectors.

TABLE D

The number of cases of infectious disease landed from vessels arriving at Liverpool and those occurring in Liverpool-bound ships which were disposed of before arrival, are shown in the following tables:

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS DURING 1959

Diseases	No. of Cases during Year		No. of vessels concerned
	Passengers	Crew	
QUARANTINABLE DISEASES			
Cholera	—	—	—
Plague	—	—	—
Smallpox	—	—	—
Typhus Fever	—	—	—
Yellow Fever	—	—	—
OTHER INFECTIOUS DISEASES			
Chickenpox	1	8	8
Dysentery	1	3	4
Gastro Enteritis	3	4	6
Glandular Fever	—	1	1
Influenza	2	20	17
Malaria	—	6	6
Measles	3	—	2
Meningitis	1	—	1
Mumps	5	5	9
Pneumonia	1	5	6
Pyrexia of unknown origin	1	2	3
Scarlet Fever	2	—	2
Tuberculosis	3	20	14
	23	74	79

CASES OF INFECTIOUS SICKNESS OCCURRING IN VESSELS DURING THE
VOYAGE BUT DISPOSED OF PRIOR TO ARRIVAL. YEAR 1959

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
QUARANTINABLE DISEASES			
Cholera	—	—	—
Plague	—	—	—
Smallpox	—	—	—
Typhus Fever	—	—	—
Yellow Fever	—	—	—
OTHER INFECTIOUS DISEASES			
Chickenpox	1	5	10
Dysentery	—	6	3
Gastro Enteritis	8	15	5
German Measles	3	—	3
Influenza	1	54	4
Malaria	—	3	3
Measles	14	1	9
Meningitis	—	2	2
Mumps	8	2	7
Pneumonia	4	5	9
Poliomyelitis	—	2	2
Pyrexia of unknown origin	—	2	2
Tuberculosis	1	7	6
	46	104	65

CASES LANDED FROM OTHER SHIPS (COASTWISE VESSELS)

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
Chickenpox	2	—	1
Influenza	—	1	1
Tuberculosis	5	—	4
	7	1	6

SECTION X

OBSERVATIONS ON THE OCCURRENCE OF MALARIA IN SHIPS

The use of malarial suppressants in ships entering the port from affected areas has continued to keep the incidence of this disease at a low figure. Six cases of malaria or suspected malaria were reported from 6 ships in the year.

SECTION XI

MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE

There were no cases, or suspected cases, of plague in ships arriving in the port of Liverpool during 1959. Two suspected rats from quays were found, on bacteriological examination, to be negative for plague.

SECTION XII

MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS

The port is divided into four districts. A port health inspector, a rat searcher, and a rat catcher are allotted to each district; the rat searcher is responsible for searching for evidence of rats, and the rat catcher for obtaining samples of the rat population both in the ships and on the quays of their district. Each rodent operative is given specific tasks daily, to be carried out at set times, and the work is checked by cross visits.

Every foreign-going ship entering the port is visited by a port health inspector and a rat searcher as soon as possible after docking. Traps are set in all ships from infected ports, and in all foreign-going ships when rat evidence is reported where time in port permits.

Coastal shipping and barges are visited and searched periodically. All rats trapped are sent to the Public Health Laboratory for examination. In all 114 rats and 77 mice were sent for such examination. Any rat suspected of being plague-infected, or any rat found dead without marks of violence, is dipped in paraffin, labelled "Suspected Rat"—"Urgent", and taken immediately to the Public Health Laboratory for examination. In the past year no suspected rats were found.

Traps are set daily on quays and wharves, and in warehouses, canteens, stores, grain mills, etc., within the area of the port. All rats trapped are sent to the Public Health Laboratory for examination.

Ratguards

All foreign-going ships, whether arriving from abroad, or proceeding coastwise, are visited on arrival by a port health inspector, and advised to fit ratguards on all moorings. Ratguards should be of sheet metal at least three feet in diameter, with sharp edged circumference, or the rope may be parcelled with canvas, or sacking coated with tar. The tar must be kept in a sticky condition. Ship's officers are also advised not to leave cargo nets hanging between the ship and shore at night.

Deratting

Deratting in ships is accomplished by:—

- (1) Routine trapping by port health rat catchers.
- (2) Trapping and/or poisoning by rat catchers employed by the shipping companies.
- (3) Fumigation with hydro-cyanic acid gas or sulphur dioxide. This method is alone approved for the issue of the International Deratting Certificate. Rodenticides are not approved for this purpose in the Port of Liverpool. The contractors undertaking this work are as follows:—

(a) Rat Catching.

Associated Fumigators (Northern) Ltd.

Hivey Fumigation Co.

Irlam Insecticides.

Scientex Ltd.

W. Strode.

(b) Fumigators.

Associated Fumigators (Northern) Ltd.

Fumigation Services Ltd.

Hivey Fumigation Co.

Scientex Ltd.

Deratting in dock premises is accomplished by:—

- (1) Routine trapping by port health rat catchers.
- (2) Routine trapping and poisoning by rat catchers employed by the Mersey Docks and Harbour Board.
- (3) Trapping and poisoning by private rat-catching firms employed by shipping companies and warehouse owners.

Examination of ships for rats

- (1) Enquiries and search by port health inspectors.
- (2) Routine searching by port health rat searchers, who search all foreign-going ships on arrival, and also make periodic searches during the discharge of cargo.
- (3) Any ship for which a deratting or deratting exemption certificate has been applied for, is searched throughout when the cargo spaces are empty, 619 vessels were so examined in 1959.
- (4) Immediate investigation of reports from ships' masters and other officers, dock workers, and privately employed rat catchers.

Rat Proofing

When temporary or permanent rat harbourage is discovered in ships, the Master and the owners are informed and advised how to eliminate it: every effort is made to see that vessels are made reasonably ratproof before a deratting or deratting exemption certificate is issued. There have been considerable improvements in the ratproofing of ships, particularly in the newer transatlantic liners.

A constant survey is made of all premises in the vicinity of ships, and no unnecessary accumulations of stores or gear are permitted.

TABLE E
RATS DESTROYED

RODENTS DESTROYED DURING THE YEAR 1959 IN SHIPS FROM FOREIGN PORTS

Category	Number
Black Rats	479
Brown Rats	3
Species not known	—
Sent for examination	114
Infected with plague	—

RODENTS DESTROYED DURING THE YEAR 1959 IN DOCKS, QUAYS,
WHARVES AND WAREHOUSES

Category	Number
Black Rats	464
Brown Rats	294
Species not known	—
Sent for examination	683
Infected with plague	—

Number of mice destroyed in vessels	252
Number of mice destroyed on quays	379
Number of mice examined from vessels and quays	423

In addition to the above, 2,875 rats and 43 mice were caught and destroyed by the Dock Board ratcatcher and private agencies.

Number of Visits to VESSELS by Rat Catchers	5,719
Number of Visits to VESSELS by Rat Searchers	5,149
Number of Visits to QUAYS, SHEDS, ETC., by Inspectors	2,914
Number of Visits to QUAYS, SHEDS, ETC., by Rat Searchers... ..	2,744
Number of Visits to QUAYS, SHEDS, ETC., by Rat Catchers	17,757

TABLE F
DERATTING CERTIFICATES ISSUED

DERATTING CERTIFICATES AND DERATTING EXEMPTION CERTIFICATES ISSUED DURING
THE YEAR 1959

Number of Deratting Certificates issued after Fumigation with			After Trapping, Poisoning, etc.	TOTAL	No. of Deratting Exemption Certificates issued	Total Certificates issued
H.C.N.	Sulphur	H.C.N. and Sulphur				
49	4	—	—	53	566	619

SECTION XIII
INSPECTION OF SHIPS FOR NUISANCES

Careful attention has been paid to the inspection of ships for nuisances. Improvement in crew accommodation and catering facilities has been maintained but an increase in sanitary defects and in the number of ships infested with vermin has been noted and the necessary procedure taken to abate those nuisances. One of the largest shipping companies in Liverpool has shown particular interest in matters of food hygiene, and now shows posters relating to this topic in the galleys of all its ships.

TABLE G
INSPECTIONS AND NOTICES
YEAR 1959

Nature and Number of Inspections		Notices Served		Result of Serving Notices
		Statutory	Other Notices	
NATURE OF INSPECTION				Nuisances Remedied
Dirty Crew Quarters...	—	None	953	953
Verminous Quarters ...	—	"	1,084	1,038
Dirty Washhouses or W.C.'s	—	"	140	138
Foul Water Tanks ...	—	"	—	—
Foul Bilges ...	—	"	—	—
Foul or Choked W.C.'s.	—	"	4	4
Accumulations of offensive refuse	—	"	63	61
Gear stowed in Crews quarters	—	"	1	1
Damp Quarters ...	—	"	1	1
Leaky Deckheads ...	—	"	2	2
Defective Heating System ...	—	"	—	—
Defective Bulkheads...	—	"	—	—
Defective Portlights, Skylights, etc.	—	"	5	3
Defective or Inadequate Ventilation	—	"	—	—
Defective Deck Covering ...	—	"	1	—
Defective Lockers ...	—	"	—	—
Defective Chain or Hawse Pipes	—	"	—	—
Rat Harbourage ...	—	"	—	—
Defective W.C. Fittings ...	—	"	6	6
Defective Soil Pipes ...	—	"	6	6
Defective Waste Pipes or Scuppers...	—	"	4	4
Defective Washing Facilities	—	"	10	10
Inadequate Lighting...	—	"	—	—
Inadequate Drainage ...	—	"	1	1
W.C.'s discharging on Quay	—	"	77	77
Miscellaneous ...	—	"	62	61
NUMBER OF INSPECTIONS...	4,977	—	—	—
TOTAL ...	4,977	—	2,420	2,366

NATIONALITY OF SHIPS VISITED

YEAR 1959

Nationality	Visits	Re-Visits	Total
British ...	3,337	144	3,481
Dutch ...	382	4	386
German...	234	4	238
Norwegian	195	1	196
Swedish...	124	2	126
American	105	1	106
Liberian	75	6	81
Russian...	75	7	82
Danish ...	74	3	77
Spanish...	67	—	67
Japanese	43	2	45
Greek ...	40	7	47
Finnish ...	38	1	39
Italian ...	31	5	36
Polish ...	30	—	30
Panamanian	28	2	30
Belgian ...	22	1	23
Bulgarian	14	1	15
Turkish...	13	1	14
French ...	8	—	8
Israeli ...	8	1	9
Argentinian	6	—	6
Egyptian	6	1	7
Chilian ...	5	—	5
Yugoslavian	4	—	4
Swiss ...	3	—	3
Costa Rican	2	—	2
Portuguese	2	1	3
Chinese ...	1	1	2
Icelandic	1	—	1
Korean ...	1	—	1
Lebanese	1	—	1
Moroccan	1	—	1
Rumanian	1	—	1
TOTAL ...	4,977	196	5,173

INSPECTION OF DOCK PREMISES

The following defects and nuisances were dealt with on dock premises:

Description of Premises	Defective or Inadequate					Structural Defects	Rat Harbourage	Rat Infestation	Accumulated Refuse	Noxious Effluvia	Dirty Conditions	Verminous Conditions	Damp Conditions	Water Supply	Miscellaneous
	Lighting	Heating	Ventilation	W.C. Accommodation	Drainage										
Dock Sheds	—	—	—	—	—	—	34	14	52	—	4	—	—	—	1
Canteens ...	—	—	—	—	17	7	18	18	8	—	28	2	—	1	50
Factories ...	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—
Quays ...	—	—	—	—	—	—	5	1	144	2	—	1	—	1	1
Roadways ...	—	—	—	—	—	—	1	—	217	—	—	—	—	—	—
Railway Premises ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Warehouses	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—
Mills ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Latrines ...	—	—	—	—	3	1	—	—	—	—	18	—	—	—	—
Lairages ...	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Offices ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Airport Premises...	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—
Total ...	—	—	—	—	20	8	60	40	421	2	50	3	—	2	53

The re-building and modernisation of all premises throughout the entire port area is still proceeding. Excellent co-operation has been received from officials of the Mersey Docks and Harbour Board.

WATERLESS HAND CLEANSERS

A commercial firm has developed a portable appliance which may have a considerable future in improving standards of personal hygiene among dock workers. It consists of an upright trolley, incorporating a renewable dispensing tank from which, on pressing a plunger, a quantity of antiseptic hand-cleanser, containing a detergent and bland oils, is pumped into the hands of the user. This fluid, which is successful in removing almost all normal working stains and grime, is then easily removed on paper towels also contained in the machine, and the process of cleaning the hands is thus made quick and easy. As these machines are readily portable, they can be moved to any berth where dirty cargoes are handled. It is likely that this method of hand cleaning will become widespread on the dock estate.

SECTION XIV

PUBLIC HEALTH (SHELLFISH) REGULATIONS, 1934/48

Repairs and renewals have been carried out to notices erected at suitable sites on the Cheshire and Lancashire limits of the Port of Liverpool. These notices show that an Order, relating to the Port of Liverpool, which was made under the above Regulations in March, 1951, forbids the collection of shellfish for sale from the prescribed area, unless they are subjected to a satisfactory process of cleansing in such places as are approved by this Authority.

No prosecutions were instituted during the year.

DANGEROUS DRUGS

During the year, 5 certificates authorising the purchase of scheduled dangerous drugs were issued under the Dangerous Drugs (No. 3 Regulations), 1923, amending the Dangerous Drugs Regulations, 1921.

MEDICAL INSPECTION OF ALIENS

The following table gives the total number of aliens arriving in the Port of Liverpool during 1959 and the number of each of the categories under which alien passengers are classified by the Immigration Department of the Home Office:—

Visitors	Business Visitors	Others	Total
7,051	74	1,924	9,049

Total number of vessels carrying Alien passengers	974
Number of vessels dealt with by the Medical Inspector	186
Number of aircraft dealt with by the Medical Inspector	18
Total number of aliens landed in the Port	9,010
Number subjected to detailed examination by Medical Inspectors...	304
Certificates issued by Medical Inspectors	9

FOOD INSPECTION

Throughout the year 1959 food inspection has been carried out in accordance with the requirements of the regulations governing importations of foods into this country for sale for human consumption.

Public Health (Imported Food) Regulations, 1937/48

Article 10 of these Regulations states that "no prohibited meat shall be imported into England or Wales for sale for human consumption, and no meat or meat product shall be so imported without an official certificate".

In several instances meat and meat products were landed without a recognised official certificate. Where the consignment was found to be sound on examination, and where the accompanying "bulk" certificate was in order, the importers were given the opportunity of securing the official certificates which, in all instances, had not been affixed owing to a clerical error by the exporter. When the correct certificates, with suitable identification, were received, the consignment was released.

MEAT AND MEAT PRODUCTS

Meat from Australia

Large consignments of meat from Australia are landed annually in Liverpool. Onchocerciasis (worm nodules) continues to affect boneless brisket, and the rejection rate varied between 2.5 per cent. and 30 per cent. in different consignments over the year. We have had the benefit of visits from the Veterinary Officer from Australia House, who has examined the meat in company with the Port Food Inspectors.

A consignment of frozen mutton, landed in January, showed damage by decomposition and 22 per cent. of the legs were rejected. This decomposition appears to be due to the freezing of the meat in bulk after it has been packed rather than the more usual method of individual freezing before packing. A later consignment, in November, also showed a serious degree of decomposition, and on this occasion 16 per cent. of the legs were rejected.

The examination of a consignment consisting of 2,750 cartons of frozen skinned rabbits and 250 cartons of frozen rabbit hindquarters from Australia was fully examined in a local cold stores. Eighteen per cent. of the whole rabbits and 27 per cent of the rabbit pieces were rejected on account of decomposition and disposed of for industrial purposes.

These are isolated instances, and the general standard of meat imported from Australia remains high.

Meat from New Zealand

Lymphadenitis was found in consignments of mutton during the year. The maximum rejection level in any consignment was 3 per cent. Echinococcus cysts in one consignment caused 3.7 per cent. of livers examined to be rejected.

Again, the general standard of New Zealand imports was quite satisfactory.

Stewed Steak from South Africa

A consignment of 250 cartons each containing 24 1-lb. tins of stewed steak from South Africa was landed in Liverpool in November. Certain tins contained very little meat but a considerable quantity of gristle, skin, liver, kidney, hairs and bristles. Sorting of the consignment by code-markings showed that all the unsatisfactory tins bore the same coding, while those bearing different codings were of good quality. From further enquiries it appeared that the unsatisfactory code-mark represented tins exported in error. The importers agreed to full sorting of the consignments and the unsuitable tins are to be re-exported or destroyed.

This information was passed to the Ministry of Health and to other seaports, and the matter was finally discussed with the South African Trade Commissioner.

Chopped Pork from Yugoslavia

A consignment of 400 cases of canned chopped pork from Yugoslavia showed a high percentage of blown tins. One hundred and nine cases were rejected: 96 of these were re-exported and 13 destroyed. The remainder was released.

Frozen Beef Hamburger Patties (Part-cooked)

Certain consignments of these meat products from Ireland were found to be contaminated with food-poisoning organisms and heat sterilisation was insisted upon before release.

This was considered necessary as the label on the containers did not advise full re-cooking before the meat was eaten.

Private Imports of Meat Products

Small quantities of preserved pork sausages from China, having no official certificate, were imported occasionally during the year. They were consigned to a private individual for consumption by himself and his family only, and were accordingly not subject to the Imported Food Regulations. The importer was warned that the quantities thus imported must not reasonably exceed that likely to be consumed by a single family.

Importations of Animal Offal

Large quantities of animal offal are regularly imported for manufacture elsewhere into animal food. Notifications in respect of every consignment are sent to the Medical Officers of Health concerned. A total of 232,589 packages from Australia, New Zealand, Northern and Southern Ireland and Argentine were landed during the year.

FISH

Prawns from Japan

In January, 1959, samples of Japanese frozen cooked peeled prawns were examined at another seaport. The bacteriological condition of this commodity was found to be unsatisfactory, and regular sampling was then undertaken at Liverpool and other major ports. In many instances general bacterial counts exceeded 250,000 per gram on plate counts at 37° C, and many organisms associated with food-poisoning were identified. The

importers were warned in strong terms of the unsatisfactory nature of the product, and some improvement was noted. A firm standard was adopted, after consultation with the Ministry of Health and other seaports, and a consignment showing a high bacterial count and contaminated with dangerous numbers of pathogenic organisms, was rejected and is now awaiting export. The quality, however, of these consignments improved, and the latest imports were found to be satisfactory.

Mussels

Uncleansed mussels are regularly imported from Ireland to Chester for cleansing. Each consignment is reported to the Medical Officer of Health for Chester on the day of arrival.

Edible Bulk Lard

Further consignments of bulk lard arrived at Liverpool from U.S.A. in 1959. This lard, while in transit, is in a solid state and requires to be liquified for discharge into static or mobile tanks.

Two samples are taken from each tank before pumping commences and two further samples from the final two feet in each tank. These samples are examined by the city analyst for assessment of contamination and for estimation of anti-oxidants under the Anti-Oxidant Regulations, 1958.

Up to the present time all consignments have been satisfactory. As the containers are often built into the construction of the ship, the Recognised Official Certificates are accepted when accompanying the ship's papers.

FRESH FRUIT AND VEGETABLES

Fresh fruit and vegetables have been landed in good condition with the exception of one consignment of 22,600 stems of bananas from British West Indies, from which consignment a total of 8,963 stems were found to be decomposing and were consequently destroyed.

Mycostatin (Nystatin) and Bananas

Certain consignments of bananas at other seaports have been found to be dusted with this antibiotic, which is a fungicide and fruit-rot controller. Close examination in this port has shown no evidence of this treatment

either on the fruit or in the polythene bags containing separate stems and it is understood from importers that its use is under trial in Jamaica but general use is not yet contemplated.

It is known that this antibiotic can be toxic, and, in addition, the consumption of small quantities in fruit may diminish the usefulness of the antibiotic for later medical use.

Fig Paste

A quantity of fig paste from Turkey showing a dark discoloration was landed in Liverpool in April. It appeared that the black streaks in the paste were due to the admixture of a dark strain of fig to the paste, and did not represent contamination of any sort. No action was taken.

Nuts

Coconuts from West Africa have continued to demand careful examination on landing. Several consignments have been found to contain as many as 15 per cent. decomposing nuts.

A consignment of ground nut kernels imported for confectionery purposes was found on examination to contain 998 bags, each 112 lbs. nett, affected by mould and these were diverted for oil expression.

EGG PRODUCTS

Spray dried egg albumen, egg albumen crystals, and frozen pasteurised egg albumen were imported from the U.S.A. during the year. Pasteurised dried egg albumen was also imported from Denmark.

All bacteriological investigations were satisfactory and none of these consignments were detained, though all consignments of egg albumen crystals are routinely subjected to heat treatment.

No egg products were imported from China during 1959.

CONDITIONAL RELEASES

Many consignments of imported food were landed in a partly-damaged condition, and consequently required some form of reconditioning before release for human consumption. Frequently the necessary reconditioning was completed in our own area and under our direct supervision. In other

instances, where permission has been asked for this to be undertaken elsewhere, permission of the appropriate Medical Officer of Health was obtained before release for this purpose. This "reconditioning" may take the form of sorting (canned foods and fresh fruit), trimming (superficial damage to meat, surface damage to lard), brushing, blowing and sieving (beans having prohibited insecticides) deodorising (meat affected by taints) and disinfecting (sultanas infested with weevil).

Other imported foods, not found suitable for human consumption, were re-exported (sultanas from Persia, found to have a large excess of sulphur dioxide, and sultanas from Iran damaged by bilge-water): down-graded for animal feeding purposes (cereals which were damaged by dirt, condensation, sea-water, and by contact with other items of cargo): or released for industrial purposes (desiccated coconut damaged by water; and edible fats, damaged by dirt for soap manufacture).

DAMAGED CARGOES

The following are three types of damaged cargoes dealt with during the year:

A consignment of 2,780 bags of chocolate crumb arrived in a ship from Southern Ireland, stowed in one hatch. Five hundred and fifty-nine bags from this total had been landed before fire was discovered in the ship. Dock water was used in the emergency, before the arrival of the local Fire Service. Finally the contents of 239 bags were destroyed as useless: 1,033 bags damaged by fire and smoke were exported: 40 bags were permitted to go forward to the exporter for experimental purposes under the supervision of the appropriate Medical Officer of Health: a further 909 bags were released as sound.

A consignment of about 2,000 cartons of lard from U.S.A. became damaged with tri-ethylene-glycol, a liquid carried in drums in the same hatch. The liquid had seeped through the joints in the cardboard cartons from leaking drums and lodged in the folds of the inner paper wrapping covering the lard and in some cartons the lard itself had become damaged. Samples of the liquid and damaged cardboard from the cartons were submitted to the City Analyst, who confirmed the contaminant as tri-ethylene-glycol, which is soluble in water, but quite immiscible with fat such as lard. The lard was repacked into clean coverings or sent for refining.

A consignment of 1,277 cartons of butter from U.S.A. was found to be infested with "Blackspot" in varying degrees and was detained. The butter was later released at the request of the owner for reconditioning under the supervision of the appropriate Medical Officer of Health in another area.

PUBLIC HEALTH (PRESERVATIVES ETC. IN FOOD) REGULATIONS, 1925/58, AND THE COLOURING MATTER IN FOOD REGULATIONS, 1957

Samples of various foods have been submitted for chemical analysis under the above Regulations. Citrus fruits have been found to have no thiourea present, no excessive amount of diphenyl and no prohibited colouring matters.

Apples from the Lebanon were found to be contaminated with as much as 7 parts of lead and 1.2 parts of arsenic per million parts of fruit. These apples were all washed under supervision before release. Apples from Canada and U.S.A. were found to conform with the above Regulations.

GENERAL HYGIENE

The standard of hygiene in the transport and handling of refrigerated food cargoes mentioned in previous years has been maintained.

UNSOOUND FOOD

Table showing the quantity and description of unsound meats utilised under supervision* during the year 1959:—

DESCRIPTION	TOTAL WEIGHT				CAUSE OF DESTRUCTION											
					Tuberculous				Brine stained, mouldy and decomposed				Other causes			
	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.
...	2	—	3	16	—	—	—	—	—	5	1	2	1	15	2	14
Lebanon	9	12	—	19	—	—	—	—	8	—	1	23	1	11	2	24
...	—	—	—	27	—	—	—	—	—	—	—	27	—	—	—	—
...	—	—	3	3	—	—	—	—	—	—	3	3	—	—	—	—
TOTAL	11	14	—	9	—	—	—	—	8	6	2	27	3	7	1	10

*These were destroyed or allowed to go for industrial purposes to the satisfaction of the Medical Officer.

Table showing the total quantities of the different unsound foodstuffs utilised under supervision during the year 1959:—

	Tons	Cwts.	Qrs.	Lbs.
Beef, Mutton, Pork and Veal	11	14	—	9
Offal (Beef, Mutton, etc.)... ..	1	—	—	9
Canned Goods	121	6	3	24
Fruit and Vegetables	4,413	3	1	3
Cereals	929	3	3	21
General (Fish, Poultry, Rabbits, etc.) ...	188	18	2	15
TOTAL	5,665	6	3	25

A total of 576 tons 14 cwts. 3 qrs. 7 lbs of unsound sugar (loose-collected, sweepings, etc.) was dealt with during the year, and suitably disposed of to local refiners for reconditioning.

The following tables give the particulars of samples of imported foodstuffs sent to the City Analyst and the Public Health Laboratory Service for examination during the year 1959:—

CITY ANALYST					PUBLIC HEALTH LABORATORY SERVICE				
Apples ... ..	...	...	...	1	Beef Patties ... ..	...	...	...	8
Currants ... ..	...	...	...	1	Egg:—				
Lard ... ..	...	...	...	79	Albumen Crystals ... ..	...	...	4	} 61
Peas, dried... ..	...	...	...	1	Dried Egg Albumen ... ..	...	...	4	
Pea Beans ... ..	...	...	...	2	Frozen Egg Albumen ... ..	...	...	40	
Peaches, canned ... ..	...	...	...	2	Spray Dried Albumen ... ..	...	...	13	
Oranges ... ..	...	...	...	7					
Sultanas ... ..	...	...	...	4	Prawns ... ..	...	...	...	221
Tallow, edible ... ..	...	...	...	2	Tomatoes, canned ... ..	...	...	...	1
Tomatoes, canned ... ..	...	...	...	1					
				<u>100</u>					<u>291</u>

MISCELLANEOUS

Radio Active Cobalt

A quantity of radio-active cobalt to be used for medical purposes was trans-shipped in Liverpool in August. The isotope was contained in two 30-cwt. drums and remained in Liverpool for 18 days between unloading and reloading into a vessel bound for China. Officers of the Port Health Authority co-operated with the police in ensuring that unloading, storage and reloading were carried out under conditions of safety.

Visits and Demonstrations

Several medical officers from seaports abroad arrived in Liverpool during the year, under World Health Organisation and other arrangements, to study health control in the Port of Liverpool. A party of 11 such visitors, led by the Professor of Tropical Hygiene from Amsterdam, came to Liverpool in August and remained for several days, during which demonstrations of smallpox control and ship fumigations were arranged.

The Port Health Authority is engaged in the issue of certificates of disinfection for foreign governments and other purposes in connection with the exportation of hides, wool, jute sacks and cloth, tailors' cuttings, rags, second-hand bags and clothing, bales of cotton, etc.

The department also endorses under the United States, Canadian and other regulations, certificates regarding wholesomeness of food articles, and the hygienic condition of the premises in which the articles are produced or stored. Poultry, game, cheese, bacon, hams, potatoes, preserved fish, pickled beef, tongues, sausage skins, lime juice, and many other items were so certified.

I desire again to express my appreciation of the valuable assistance received from H.M. Collector of Customs and staff, Ministry of Transport, the Mersey Docks and Harbour Board and their officers, river pilots, and the various shipping companies who have co-operated with the Port Health Authority in the maintenance of Public Health and the prevention of disease in the port. The Consular Bodies have at all times given courteous assistance.

ANDREW B. SEMPLE,
Medical Officer of Health,
Liverpool Port Health Authority.

Visits and Demonstrations

Several medical officers have been sent to Liverpool during the year under World Health Organization and to study health control in the port of Liverpool. A party of 12 was visited by the Director of Tropical Hygiene from Liverpool to Liverpool in August and remained for several days, which demonstrated of sanitary control and the importance of the

The Port Health Authority is engaged in the work of co-operation with the exportation of hides, wool, tanned skins and other goods, second hand bags and clothing, etc.

The Department also receives under the United States Consular and other regulations, certificates regarding the condition of food articles and the hygiene condition of the premises in which the articles are produced or stored. Party given, however, when parties are served the port health department also have been and other items were so certified.

INTERNATIONAL HEALTH EXHIBITION

I have again to express my appreciation of the valuable assistance rendered from H.M. Customs and Excise, Ministry of Transport, the Ministry of Health and other officials, from whom the various shipping companies also have co-operated with the Port Health Authority in the maintenance of Public Health and the prevention of disease in the port. The Port Health Authority are at all times given courteous assistance.

WALTER R. BRADLEY

Medical Officer of Health

Sanitary Department
Liverpool
The following is a list of the names of the various companies and firms which are engaged in the exportation of goods from Liverpool to other ports and to foreign countries. The names are given in alphabetical order of the names of the firms and are not necessarily in the order in which they are visited by the Port Health Authority. The names are given in full, and are not necessarily in the order in which they are visited by the Port Health Authority.