

Volume 11

Number 18

3 May 2001



NEWS



ENTERIC



RESPIRATORY



IMMUNISATION



HIV/STIs



BACTERAEamia



ZOONOSES



DIARY



BACK ISSUES

CDR WEEKLY

Main stories this week:

[Outbreak of drug resistant tuberculosis in north London: update on prison links](#)

[Outbreak of cryptosporidiosis in Northern Ireland](#)

[Legionnaires' disease associated with a school trip to Spain](#)

[Animal foot and mouth epidemic in the UK - information for those concerned with human health - update](#)

Updated this week:

[Respiratory tract infections, England and Wales: laboratory reports, weeks 14-17/01](#)

[Laboratory reports of parainfluenza type 3](#)

[Common animal associated infections, England and Wales: laboratory reports, weeks 14-17/01](#)

[Common imported infections, England and Wales: laboratory reports, weeks 14-17/01](#)

To download a printable version of this week's *CDR Weekly*, click the icon below. Please note that the pdf file now reflects the appearance of the website, not the old print version.



If you need *Acrobat Reader*, click [here](#)

If you have any comments or encounter any problems with this website, please contact nhough@phls.org.uk

Best viewed at a screen resolution of 800 x 600 pixels

Published by

PHLS Communicable Disease Surveillance Centre



NEWS



ENTERIC



RESPIRATORY



IMMUNISATION



HIV/STIs



BACTERAEMIA



ZOONOSES



DIARY



BACK ISSUES

Contents

[Outbreak of drug resistant tuberculosis in north London: update on prison links](#)

[Outbreak of cryptosporidiosis in Northern Ireland](#)

[Legionnaires' disease associated with a school trip to Spain](#)

[Animal foot and mouth epidemic in the UK - information for those concerned with human health - update](#)

Outbreak of drug resistant tuberculosis in north London: update on prison links

There have now been 49 cases of isoniazid-resistant tuberculosis diagnosed and reported in London (mainly north and central parts of north London) since 1995. The first case dated from 1995, and subsequent cases were diagnosed in 1998 (2), 1999 (15) 2000 (25) and 2001 (6 cases to date). These have been identified as due to the same strain of *Mycobacterium tuberculosis* by IS6110 restriction fragment length polymorphism typing (1,2). During this period, the rates of notifications for tuberculosis in London have increased from 29.1 per 100,000 in 1995 to 40.3 in 2000, a 38% rise over five years (table).

Table Tuberculosis in London 1995 to 2000

Year	Notifications in London	Rate in London /100,000	Percentage change in London rate from 1995	Rate in England and Wales/100,000	Notifications in London as a percentage of notifications in England and Wales*
1995	2042	29.1	–	10.8	36.4
1996	2190	31.0	7	10.9	38.7
1997	2411	33.8	16	11.2	41.2
1998	2444	34.0	17	11.6	40.2
1999	2493	34.2	18	11.7	40.6
2000	2938	40.3	38	12.9	43.2

* 1999 population data used for 2000 (2000 population data not yet available). Population of London is approximately 14% of the population of England and Wales; 2000 data are provisional.

Fourteen of the 49 cases have been linked to a London prison. Investigations have revealed that in seven of these cases transmission probably occurred, and in one case transmission possibly occurred, within the prison. The periods that the seven cases spent in prison overlapped with the time that other cases in prison were likely to have been infectious. There was no known contact between these seven cases and the other cases without prison links, and none of them had been diagnosed with tuberculosis previously.

The first prison case was an inmate for the three months prior to being diagnosed with smear positive pulmonary tuberculosis in January 2000. Five cases diagnosed as a result of symptomatic disease were in prison for at least part of the time that this first case was likely to be infectious. The interval between the last exposure to the infectious case and the onset of symptoms in the subsequent cases ranges from 2 to 9 months (mean 5.2 months). For the two other cases in which transmission within prison was probable, one was diagnosed through tracing the prison contacts of the five cases and the other was diagnosed during the investigation of unrelated symptoms.

This is the first documented outbreak of tuberculosis in a prison in the United Kingdom. The prison had comprehensive arrangements in place for investigation and referral of cases of tuberculosis prior to the outbreak. The outbreak has led to further strengthening of tuberculosis control and prevention measures, including symptom screening of new prisoners, direct supervision of the administration of all doses of treatment, designation and training of a lead tuberculosis nurse, and occupational health screening.

An incident committee involving the prison health services and the local health authority has been established to investigate and manage the incident. Recommendations arising out of the investigation

will be made to the Department of Health group that is reviewing tuberculosis control policy for the prison health services as a whole. For further information and to provide information about potentially linked cases, contact Helen Maguire, Regional Epidemiologist, CDSC London (tel: 020 7725 2734; email: h.maguire@cdsc.nthames.nhs.uk).

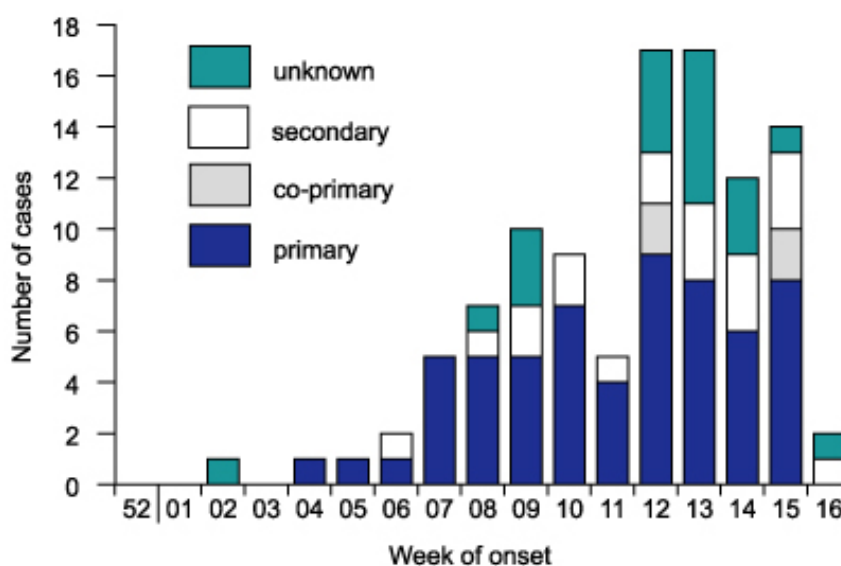
1. CDSC. Drug resistant tuberculosis in north London. *Commun Dis Rep CDR Wkly* 2000; **10** (32): 285,288.

2. CDSC. Drug resistant tuberculosis in north London. *Commun Dis Rep CDR Wkly* [serial online] 2001 [cited 2 May 2001]; **11** (3): news. Available online at www.phls.co.uk/publications/CDR%20Weekly/archive/news0301.html#drug.

Outbreak of cryptosporidiosis in Northern Ireland

Twelve cases of cryptosporidiosis were reported to the Eastern Health and Social Services Board in Northern Ireland in the week beginning 1 April, with 21 being reported the following week. These weekly totals were considerably greater than would normally be expected in April. Most of those affected lived within an urban area and few had been abroad or had animal contact. When the postcodes of laboratory confirmed cases were mapped against water supply zone it was noted that the attack rate among those receiving water exclusively from the Dunore water treatment works was 2.8/10,000 population compared to 0.14/10,000 in those receiving water from other sources. Investigations in the adjacent Northern Board into a rise in reported cases of cryptosporidium over the same time noted similar increased attack rates in those receiving water from this water treatment works. By 25 April there were a total of 110 confirmed cases within the Dunore supply area (figure).

Figure Cases of cryptosporidiosis in outbreak, by week of onset



The Dunore water treatment works uses slow sand filtration and supplies approximately 100,000 properties in the greater Belfast and south Antrim areas, which includes parts of the population of the Eastern and Northern Boards. There had been no previous history of cryptosporidiosis associated with this water treatment works. Daily monitoring of continuous water samples in part of this supply area had commenced on 24 February with oocysts counts ranging from 0-0.62/10 litre up to 21 April. Small peaks were noted over a four day period at the end of February (max 0.22 oocysts/10l), over a seven day period in mid-March (max 0.41 oocysts/10l) and 29 March (0.62 oocysts/10l). Allowing for an average seven day incubation period these would approximately correspond with the peaks in the epidemic curve (figure).

Positive faecal samples have been sent to the PHLS Cryptosporidium Reference Unit in Swansea. Of the specimens so far examined 25 were *Cryptosporidium parvum* genotype 1 and four *C. parvum* genotype 2. The genotype 1 specimens have been identified from patients living in the affected supply area of both Health Boards. Genotype 1 implies that contamination was derived from a human rather than a livestock source.

Detailed investigation identified that a blocked drain at the water treatment works may have allowed the entry of a small quantity of untreated water into the filtration system. Remedial action at the water treatment works was completed on Sunday 22 April.

An inter-board outbreak control team including CDSC (Northern Ireland) is managing the incident. The public, hospitals and general practitioners were reminded of previous expert advice that all water, from whatever source, that might be consumed by immunocompromised people should be brought to the boil and allowed to cool before use.

Legionnaires' disease associated with a school trip to Spain

Two cases of legionnaires' disease have been confirmed in coach drivers who took a party of 36 school children from Liverpool to Spain for a week's activity holiday from 7 to 14 April 2001. The group

stayed in shared chalets at a sports holiday club in Tossa de Mar on the Costa Brava. Both drivers, who shared a chalet, developed symptoms on 11 April. One has died and the other remains seriously ill in hospital. Four teachers accompanied the children and none of them or any of the children have experienced any illness related to legionella infection.

One of the cases was diagnosed by culture of the organism and detection of urinary antigen, and the other by urinary antigen detection only. *Legionella pneumophila* sg1 has been confirmed as the causative organism in both cases by the PHLS Respiratory and Systemic Laboratory at the Central Public Health Laboratory, Colindale. A case of legionnaires' disease was reported to the PHLS Communicable Disease Surveillance Centre in someone who also stayed at this club in February 2001.

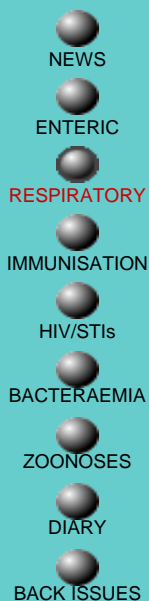
An outbreak control team was convened in Liverpool and undertook to provide information about the outbreak to the school, and the parents and family doctors of the children who went on the trip. The tour operators involved in the school trip were also informed, as were the Spanish collaborators in the European Surveillance Scheme for Travel Associated Legionnaires' Disease. The Spanish public health officials have arranged for environmental investigations to be carried out to identify the source of the outbreak and for control measures to be implemented at the accommodation site.

CDSC North West or CDSC Colindale would be pleased to receive any additional information relating to this outbreak. Please contact Dr Qutub Syed (tel: 01244 665300) or Carol Joseph (tel: 020 8200 6868).

Animal foot and mouth epidemic in the UK - information for those concerned with human health - update

Further to the information published in [CDR Weekly of 26 April](#) more possible cases of foot and mouth disease in humans have been reported to CDSC. As of Wednesday 2 May 2001, 21 specimens had been received by CPHL and tested by PCR for human foot and mouth disease. Nineteen of these tests were negative and results are awaited for the other two specimens. Preparations are being made for later antibody testing of convalescent sera where that is available from the patients.

[Back to top](#)



Contents

[Respiratory tract infections, England and Wales: laboratory reports, weeks 14-17/01](#)

[Laboratory reports of parainfluenza type 3](#)

Respiratory tract infections, England and Wales: laboratory reports, weeks 14-17/01

	Number of reports received				Total reports
	14/01	15/01	16/01	17/01	14-17/01
Adenovirus (excluding EM faeces)	13	43	16	31	103
Coronavirus	–	–	–	–	–
Influenza A	38	2	14	8	62
Influenza B	88	15	43	28	174
Parainfluenza	7	2	25	21	55
RS virus	150	86	34	37	307
Rhinovirus	3	4	6	7	20
Chlamydia sp	2	3	1	7	13
Coxiella burnetti	2	–	–	1	3
Legionella sp	2	3	1	2	8
Mycoplasma pneumoniae	13	2	11	9	35

Adenovirus (excluding types 40, 41, group F, EM faeces): 57 patients had eye infections. M2m died suddenly.

Coronavirus: no cases were reported .

Influenza A: M 16y and M 38y had pleural effusion; and F 1y congenital heart disease. South East region reported 23 cases, Trent 13, South West 12, and Eastern 7. Thirty-eight per cent of patients (24 cases) were aged under 15 years of age and 27% (17) were aged 15 to 44 years. M 19y had a history of recent foreign travel.

Influenza B: 12 patients had pneumonia and one bronchiolitis. M 42y had impaired immunity; M 73y polyneuropathy; F 19y liver failure; and F 21y cystic fibrosis. South West reported 49 cases, West Midlands 43, South East 25, and Trent 20. Fifty-two per cent of patients (92 cases) were aged 15 to 44 years. M 25y and F 32y both had a history of recent foreign travel.

Parainfluenza (type 1, 2; type 3, 47; untyped, 6): South West region reported 22 cases, West Midlands 11, and Wales 6. Seventy-six per cent of patients (42 cases) were under 1 year of age.

Respiratory syncytial virus: 35 patients had bronchiolitis and four pneumonia. South East region reported 189 cases and South West 37. Eighty-three per cent of patients (255 cases) were under 1 year of age.

Rhinovirus: 20 cases were reported. M 14y had impaired immunity. M 3m died suddenly. Sixty per cent of patients (12 cases) were under 1 year of age.

Respiratory chlamydia (*C. psittaci*, 7; *C. pneumoniae*, 7): five patients had pneumonia. M49y had contact with birds. M 68y and F 62y both had a history of recent foreign travel.

Coxiella burnetii: three cases were reported. Wales reported two cases and London region one.

Legionella: eight cases were reported, six were males aged between 36 and 66 years and two were female aged between 49 and 80 years. All had pneumonia. M 59y died. Five cases were associated with travel abroad: Spain two (both associated with an outbreak in Spain), India, Jamaica, and Portugal one each. M 54y, F 49y, and F 80y acquired infection in the community.

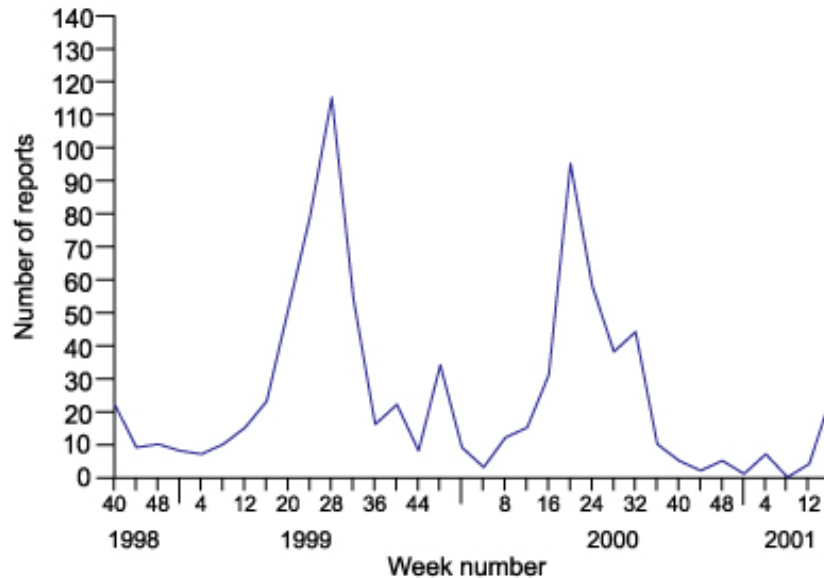
Mycoplasma pneumoniae: 23 patients had pneumonia. South West region reported 21 cases, South East 14, Eastern 9, and Northern and Yorkshire 7. Thirty-three per cent of patients (20) were aged under 15 years.

Laboratory reports of parainfluenza type 3

Human parainfluenza viruses contribute substantially to the burden of acute respiratory infections, particularly in the very young and the elderly. A variety of upper and lower respiratory syndromes, including rhinitis, otitis laryngotracheobronchitis or croup, bronchiolitis, and pneumonia are associated with parainfluenza virus infection.

Four major serological types (1-4) have been identified. Parainfluenza virus types 1, 2 and 4 (PIV-1, PIV-2 and PIV-4) occur mainly in the late autumn (November to December) and winter (January to February). Parainfluenza type 3 (PIV-3) shows a different seasonal pattern, with regular annual peaks occurring between April and August (spring and summer) and low numbers reported during December to March (1). The number of reports received during 2000 peaked during weeks 17-20 (late April to mid-May) (figure).

Figure Laboratory reports of parainfluenza type 3, 4-weekly totals: 1999-2001

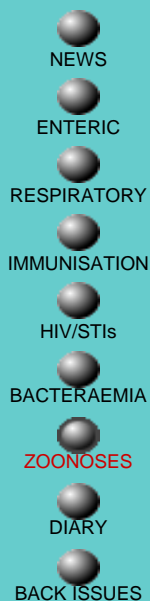


Numbers of laboratory reports of PIV-3 received by CDSC have increased in recent weeks and appear to be following the usual seasonal pattern. PIV-3 infections may be contributing to the respiratory infections currently being reported.

1. Laurichesse H, Dedman D, Watson JM, Zambon MC. Epidemiological features of parainfluenza virus infections: laboratory surveillance in England and Wales, 1975-1997. *European Journal of Epidemiology* 1999; **15**: 475-84.

[Archive data](#)

[Back to top](#)



Contents

[Common animal associated infections, England and Wales: laboratory reports, weeks 14-17/01](#)

[Common imported infections, England and Wales: laboratory reports, weeks 14-17/01](#)

Common animal associated infections, England and Wales: laboratory reports, weeks 14-17/01

Organism	Total reports for weeks 14-17/01		Cumulative totals for weeks 01-17	
	2001*	2000	2001*	2000
<i>Borrelia burgdorferi</i> **#	7	5	11	17
<i>Leptospira hardjo</i> **##	–	–	2	1
<i>Leptospira icterohaemorrhagiae</i> **##	–	–	4	4
<i>Leptospira other</i> **##	1	–	11	8
<i>Pasteurella haemolytica</i>	–	–	1	–
<i>Pasteurella multocida</i>	30	11	97	70
<i>Pasteurella pneumotropica</i>	1	–	2	–
<i>Pasteurella spp</i>	7	2	17	14
<i>Toxocara canis</i>	–	–	–	1
<i>Toxocara cati</i>	–	–	–	–
<i>Toxocara spp</i>	–	–	–	–
<i>Toxoplasma gondii</i>	2	1	8	8
<i>Toxoplasma spp</i>	5	5	25	22

* provisional data; ** by specimen date; # Lyme Disease Reference Laboratory and CDSC; ## Leptospira Reference Laboratory and CDSC

Common imported infections, England and Wales: laboratory reports, weeks 14-17/01

Organism	Total reports for weeks 14-17/01		Cumulative totals for weeks 01-17	
	2001*	2000	2001*	2000
Arbovirus	–	–	–	–
Dengue virus	–	–	–	–
<i>Ascaris spp</i>	4	9	35	30
Hookworm (unspecified)	–	1	9	19
<i>Ancylostoma duodenale</i>	–	–	–	–
<i>Necator americanus</i>	–	–	–	–
<i>Leptospira sp</i>	1	–	2	2
<i>Hymenolepis diminuta</i>	–	–	–	1
<i>Hymenolepis nana</i>	1	–	6	3
<i>Hymenolepis sp</i>	–	–	–	–
<i>Schistosoma haematobium</i>	4	1	14	17
<i>Schistosoma intercalatum</i>	–	–	–	–
<i>Schistosoma mansoni</i>	–	–	7	2
<i>Schistosoma sp</i>	–	1	9	8
<i>Strongyloides stercoralis</i>	1	–	13	3
<i>Strongyloides sp</i>	–	–	–	1

* provisional data