Volume 11
Number 44

1 November 2001

CDR WEEKLY

Main stories this week:

Clinician and microbiologist vigilance for potential deliberate releases of microbiological agents

Outbreak of hepatitis A infection among injecting drug users in Ipswich

Low levels of RSV and *Mycoplasma pneumoniae* infection

PHLS response to the national sexual health strategy

New edition of Health information for overseas travel

Updated this week:

Respiratory tract infections, England and Wales: laboratory reports, weeks 40-43/01

Opportunist mycobacterial infections, England and Wales: laboratory reports, weeks 27-39/01

Mycobacterium tuberculosis infections, England and Wales: laboratory reports, weeks 1-39/01

Common animal associated infections, England and Wales: laboratory reports, weeks 40-43/01

Common imported infections, England and Wales: laboratory reports, weeks 40-43/01

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

Last updated: 1 November 2001

Next update due 8 November 2001

Contents

Next | Top | PDF | Archive

Clinician and microbiologist vigilance for potential deliberate releases of microbiological agents

Most deliberate releases of anthrax in the United States (US) that have resulted in morbidity or mortality have been detected through case-finding rather than through detection of anthrax spores (1,2). It is important to detect cases, and therefore releases, as early as possible, so that other people who may have been at risk can be identified and offered antibiotic prophylaxsis. Therefore the public health authorities in the US have been asking clinicians and microbiologists to be vigilant and are applying a more sensitive but not entirely specific description for case-finding (box) ie some, if not most, people with these characteristics will not have the actual disease (1-3).

Box Detection of deliberate releases - cardinal signs for case detection of anthrax, plague, botulism, or smallpox

In a previously healthy person, any of the following four clinical pictures requires urgent attention.

1. Inhalational (pulmonary) anthrax and plague

- Rapid onset severe sepsis with respiratory failure, not due to a predisposing illness.
- Sudden, severe, unexplained febrile illness or febrile death.

NB The cardinal sign for anthrax is mediastinal widening on chest x-ray (<http://www.phls.org.uk/advice/Anthraxqashealthprofessionals.pdf> page 2)

2. Cutaneous anthrax

- Commonly affects hands, forearms, and head (<http://www.phls.org.uk/advice/Anthraxqashealthprofessionals.pdf> page 2)
- Cardinal feature is painless swelling of skin
- Originally a small bump which then ulcerates and becomes weepy
- Pronounced swelling (oedema of skin) frequently surrounds the lesion
- Ulcer develops a black centre in 2-6 days (<http://www.phls.org.uk/advice/Anthraxqashealthprofessionals.pdf> page 2)

For microbiologists the unexpected finding of non-motile Gram-positive bacilli in normally sterile or fluids or from wound sites require urgent consideration of the possibility of *Bacillus anthracis*.

3. Botulism

- Acute onset of bilateral cranial nerve involvement.
- Descending weakness or paralysis which may extend to complete flaccid paralysis, but the patient remains alert.
- Fever unusual, as is loss of sensation.

4. Smallpox

In the event of a deliberate release in the United Kingdom population (mostly non-immune), it is extremely unlikely that single, mild cases of feverish, pox-like illnesses will occur. It is much more likely that clusters of moderate to severe disease would be seen, ie clusters of cases with the following:

- An abrupt onset moderate fever (up to 39°C), with extreme prostration,
- A characteristic vesicular rash most dense on the extremities and face <http://www.phls.co.uk/advice/smallpox%20photos.htm>. The focal rash begins on the third or fourth day of illness. Skin lesions over one area of body are generally of the same stage of development. New and enlarging vesicles coalesce to form soft, flaccid bullae covered by skin that easily rubs off.
- Less commonly, an erythematous or purpuric rash may appear earlier in the illness and is associated with a poorer prognosis.

If a patient is seen with any of these four pictures, expert clinical opinion should be sought urgently. In addition for England, Wales, and Northern Ireland the local consultant in communicable disease control (or their counterpart in Scotland) and the CDSC duty doctor (tel: 020 8200 6868) should also be contacted urgently and given details. In Scotland, the Scottish Centre for Infection and Environmental Health (tel: 0141 300 1100) should also be contacted.

For a more detailed description and pictures from the PHLS web-site visit http://www.phls.co.uk/facts/deliberate_releases.htm

1. Centers for Disease Control and Prevention. Investigation of anthrax associated with intentional exposure and interim public health guidelines. *MMWR Morbid Mortal Wkly Rep* 2001; **50** (41): 889-93. Available online at <www.cdc.gov/mmwr/PDF/wk/mm5041.pdf>.

2. Centers for Disease Control and Prevention. Recognition of illness associated with the intentional release of a biologic agent. *MMWR Morbid Mortal Wkly Rep* 2001; **50** (41): 893-7. Available online at <www.cdc.gov/mmwr/PDF/wk/mm5041.pdf>

3. PHLS. Interim guidance on deliberate releases of biological agents – update. *Commun Dis Rep CDR Wkly* [serial online] 2001 [cited 1 November 2001]; **11** (42): news. Available online at <http://www.phls.org.uk/publications/CDR%20Weekly/archive/news4201.html#Anthrax>.

Next | Top |

Outbreak of hepatitis A infection among injecting drug users in Ipswich

There have been seven confirmed cases of hepatitis A virus (HAV) infection among injecting drug users (IDUs) and one confirmed case in a close contact of that community. All the cases have been in Ipswich, and there are more suspected cases in the same risk group. The first two cases occurred in July, but subsequently there have been clusters of two to three cases every four to five weeks. There is evidence of a link among some of the cases. An outbreak control group has been established at the Suffolk Health Authority. An active information campaign has been set up, targeting drug users with advice about the signs and symptoms of HAV infection and how to prevent spread through good hygiene and vaccination. The community drug team and GPs have started to vaccinate IDUs.

It is well known that outbreaks of hepatitis A can occur among IDUs, probably can spread by direct contact and not by the blood borne route. Hepatitis A could have serious consequences in people already infected with hepatitis B or C virus, and a high proportion of the injecting drug users are already infected with hepatitis C.

The outbreak control group would like to know of any cases outside Suffolk that might be connected with this outbreak. Please contact locum consultant in communicable disease control Torbjorn Sundkvist (email: Torbjorn.Sundkvist@hq.suffolk-ha.anglox.nhs.uk) or clinical medical officer Hamid Mahgoub (email: Hamid.Mahgoub@hq.suffolk-ha.anglox.nhs.uk).

1. Sundkvist T, Johansson B, Widell A. Rectum carried drugs may spread hepatitis A among drug addicts. *Scand J Infect Dis* 1985; **17**: 1-4

2. Widell A, Hansson BG, Moestrup T, Nordenfelt E. Increased occurrence of hepatitis A with cyclic outbreaks among drug addicts in a Swedish community. *Infection* 1983; **11**: 198-200.

Next | Top |

Low levels of RSV and *Mycoplasma pneumoniae* infection

Laboratory reports of respiratory syncytial virus (RSV) and *Mycoplasma pneumoniae* made to the PHLS Communicable Disease Surveillance Centre from PHLS and NHS laboratories continue to remain at low levels.

Levels of RSV are expected to follow the normal seasonal pattern of increase over the next few weeks (figure 1). Approximately 80% of the reports made to CDSC each winter are from children aged less than 1 year (figure 2). Bronchiolitis caused by RSV places considerable strain on paediatric services during winter months.

Figure 1 Laboratory reports to CDSC of infections due to Respiratory Syncytial Virus: England and Wales, 1990-2002 (4 weekly)

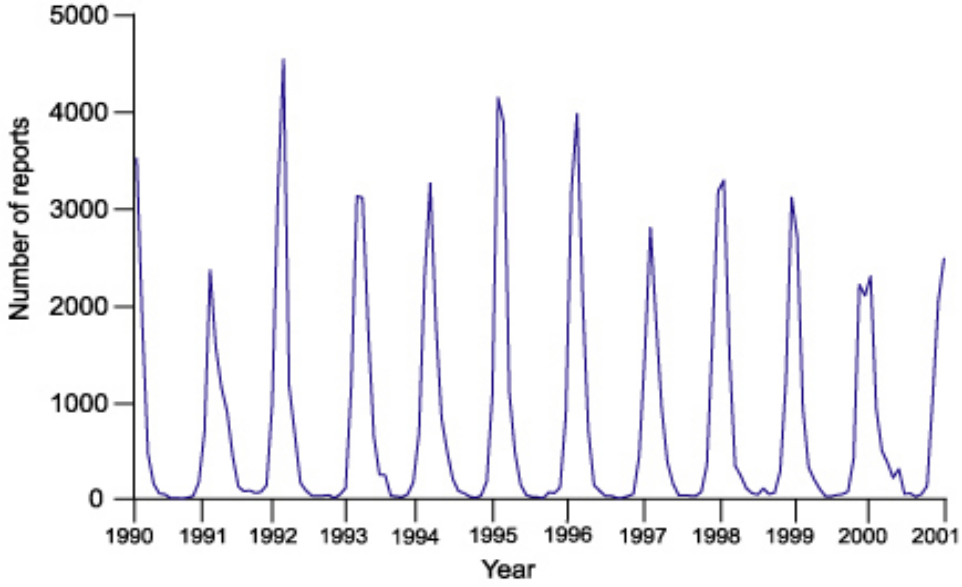
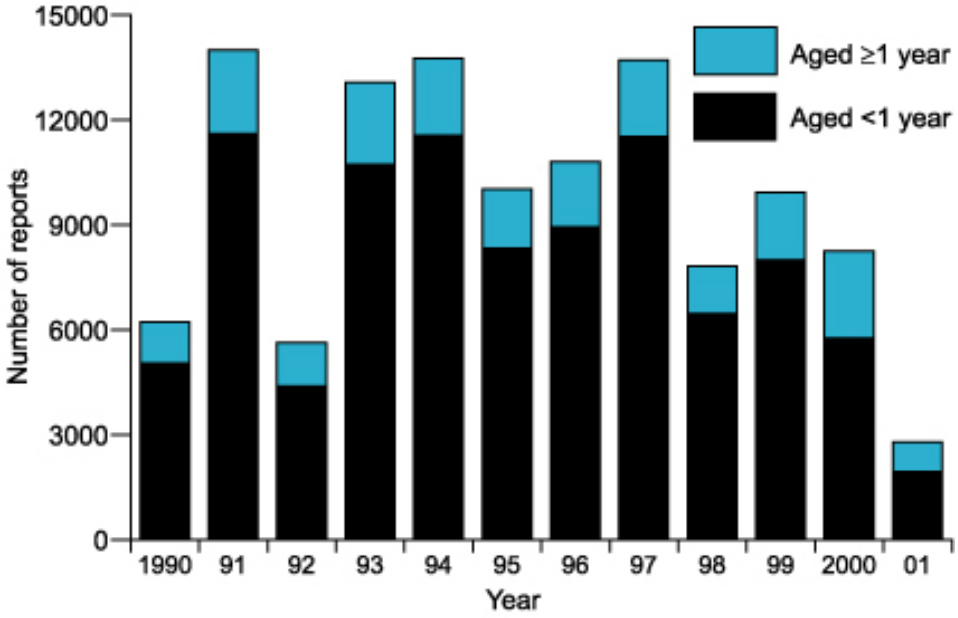


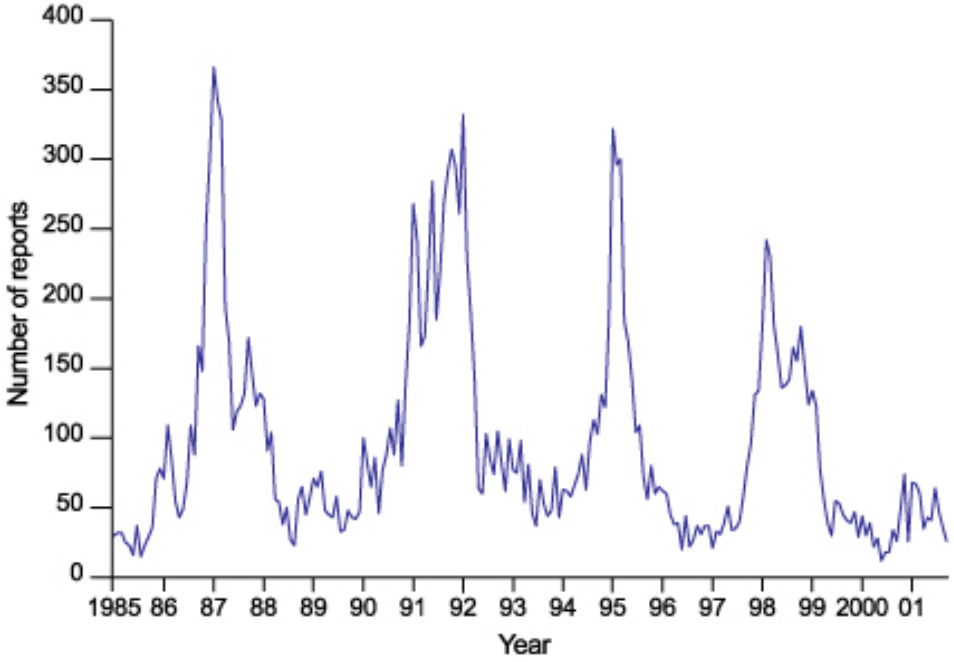
Figure 2 Laboratory reports of RSV made to CDSC by age, 1990-2001



The predominance of reports from hospitalised children aged less than 1 year reflects the fact that RSV infections in adults and in community cases of all ages are probably significantly underascertained (1).

Previous evidence suggests that the four-yearly cycle of increased activity of *M. pneumoniae* infection will begin this winter (2001/02), and will continue into next year (figure 3). *M. pneumoniae* causes acute respiratory illness ranging in severity from mild respiratory illness to severe pneumonia.

Figure 3 Laboratory reports to CDSC of infections due to *M. pneumoniae*: England and Wales, 1990-2002 (4 weekly)



Regular reports of acute respiratory illness, including RSV and *M. pneumoniae* are published in the weekly influenza report on the PHLS website at <http://www.phls.co.uk/facts/influenza/fluactivity0102.htm>

1. Crowcroft NS, Cutts F, Zambon MC. Respiratory syncytial virus: an underestimated cause of respiratory infection, with prospects for a vaccine. *Commun Dis Public Health* 1999; **2** (4): 234-41.

Next | Top |

In July of this year, the Department of Health launched a consultation exercise on the first national strategy on sexual health and HIV (1). The long awaited strategy advocates a modernisation and restructuring of services to meet patients' needs. It aims to prevent the spread of sexually transmitted infections (STIs) and HIV and to improve care and treatment for those who need it. Some of the highlights of the strategy include strengthening existing GUM services, greater involvement of primary care, and the implementation of national screening for genital *Chlamydia trachomatis* infection. The strategy has been developed with a range of stakeholders including service users, members of target groups and professionals in the field. Indeed, the PHLS has been an active player the strategy's development.

The HIV/STI Division of CDSC has been asked, on behalf of PHLS HQ, to collate the PHLS' response to the sexual health strategy and we are keen to receive your views on this document. We are particularly interested in providing feedback to the Department of Health in three key areas:

- Surveillance developments to support the new sexual health strategy and potential roles of the PHLS.
- Enhancing the future role of laboratory services in STI diagnosis and management.
- PHLS' role in supporting the development and implementation of public health interventions aimed at improving sexual health.

Although there has already been informed comment from a number of specialists in STIs/ HIV, the PHLS is keen to canvass the views of a wider cross-section of the organisation and aims to put together comments by the 20 November 2001. The document may be found at: <http://www.doh.gov.uk/nshs/bettersexualhealth.pdf>. All comments should be sent to Dr Kevin Fenton at, HIV/STI Division, PHLS, Communicable Disease Surveillance Centre, 61 Colindale Avenue, London NW9 5EQ; email kfenton@phls.org.uk

1. Department of Health. The national strategy for sexual health and HIV. London: Department of Health, 2001. Available at <www.doh.gov.uk/nshs/bettersexualhealth.pdf>.

Top |

New edition of Health information for overseas travel

The new edition of *Health information for overseas travel* (1) ('the yellow book') was published on 25 October 2001 and replaces the original 1995 edition. Copies are being circulated to all general practitioners and for the first time to practice nurses.

The aim of the book remains to provide a concise and authoritative source of information about the common health risks to travellers from the United Kingdom (UK) and how to reduce these risks. Country-by-country recommendations on both immunisation and malaria prophylaxis are included.

The major changes to this edition are highlighted in the introduction. In particular, the advice on malaria prophylaxis has been completely revised in the light of the latest advice from the national advisory committee (the PHLS Advisory Committee on Malaria Prophylaxis).

There are revised vaccine recommendations for pilgrims travelling to Saudi Arabia on Hajj or Umrah. The Saudi Arabian embassy has now made this a visa entry requirement with effect from 17 October 2001. Travellers on Hajj or Umrah may be refused entry if they do not have a valid certificate showing they have received the quadrivalent meningococcal vaccine. The vaccine is available from GlaxoSmithKline (tel: 0808 100 9997). Further information was circulated in CMO letter PL/CMO2001/5, dated 15 October 2001 (2).

Health information for overseas travel is now available on the internet and will be updated on a regular basis. You can access this at <http://www.the-stationary-office.co.uk/doh/hinfo/index.htm>.

1. Department of Health, National Assembly for Wales, Scottish Executive Health Department, DHSS PS (Northern Ireland) with the Public Health Laboratory Service Communicable Disease Surveillance Centre. *Health information for overseas travel* (2nd ed). London: The Stationery Office, 2001. ISBN 0-11-322329-3. Price £8.50.

2. Chief Medical Officer. *Current vaccine and immunisation issues* (PL/CMO2001/5). London: Department of Health, 2001.

Back to top

Contents

Next | Top |

Respiratory tract infections, England and Wales: laboratory reports, weeks 40-43/01

	Number of reports received				Total reports
	40/01	41/01	42/01	43/01	40-43/01
Adenovirus (excluding EM faeces)	13	19	13	30	**75**
Coronavirus	–	–	–	–	**–**
Influenza A	3	2	–	4	**9**
Influenza B	1	1	–	2	**4**
Parainfluenza	6	8	14	15	**43**
RS virus	12	11	19	24	**66**
Rhinovirus	1	1	–	2	**4**
Chlamydia sp	5	1	2	3	**11**
Coxiella burnetti	–	1	–	2	**3**
Legionella sp	8	7	7	6	**28**
Mycoplasma pneumoniae	12	16	7	28	**63**

Adenovirus (excluding types 40, 41, group F, EM faeces): 75 cases were reported. Thirty-eight patients had eye infections.

Coronavirus: no cases were reported

Influenza A: nine cases were reported. North West region reported four cases, South East three, and Northern and Yorkshire and Trent one each. Three of the cases were aged less than 10 years.

Influenza B: four cases were reported. F 31y had recent foreign travel. North West and South East region each reported two cases.

Parainfluenza (type 1, 9; type 2, 17; type 3, 17): 43 cases were reported. North West region reported 20 cases, South East seven, South West, West Midlands, and Wales three each, Eastern, London, and Northern and Yorkshire two each, and Trent one.

Respiratory syncytial virus: 66 cases were reported. North West region reported 26 cases, London 11, West Midlands eight, Eastern and South East six each, Wales three, Northern and Yorkshire, South West, and Trent two each.

Rhinovirus: four cases were reported. Two were aged less than 1 year.

Respiratory chlamydia (*C. psittaci*, 2 ; *C. pneumoniae*, 5; *Chlamydia* spp, 4): 11 cases were reported. Three patients had pneumonia.

Coxiella burnetii: 3 cases were reported. Northern & Yorkshire (1 case), West Midlands (1 case), London (1 case).

Legionella: 25 cases were reported with pneumonia and 3 with non-pneumonic infection. Twenty-three were male aged 32 to 88 years and five were female aged 56 to 85 years. One male case, whose age is unknown, died. Fifteen cases were associated with travel: Spain (5), England (3), Ireland, Turkey, France, Italy, Germany, America one each and one case travelled to Belgium, France, Andorra, and the Netherlands. The three cases who travelled in England, M 59y, M 69y and F 84y with non-pneumonic infection, are associated with an outbreak in Devon. Thirteen cases, eleven males aged between 32 and 63 years, and F 56y and F 85y acquired their infections in the community.

Next | Top |

Opportunist mycobacterial infections, England and Wales: laboratory reports, weeks 27-39/01

	Number of reports received weeks 27-39/01				Cumulative totals 01-39*	
	Male	**Female**	**Not stated**	**Total**	**2001**	**2000**
***Avium-intracellulare* group**	35	42	3	**80**	**204**	**262**
Site of isolate**						
pulmonary	28	35	3	**66**	**158**	**184**
lymph node	2	3	–	**5**	**9**	**4**
blood	2	2	–	**4**	**14**	**18**
other	3	3	–	**6**	**27**	**59**
M. malmoense	22	16	–	**38**	**104**	**103**
Site of isolate						
pulmonary	21	10	–	**31**	**78**	**86**
lymph node	1	–	–	**1**	**2**	**–**
other	–	5	–	**5**	**23**	**16**
M. kansasii	18	10	–	**28**	**79**	**87**
M. xenopi	13	3	–	**16**	**34**	**28**
Other species#	3	4	1	**8**	**19**	–

* provisional data; ** number of isolates may exceed number of cases, as cases may have disease at more than one site; # *M. marinum* 4; *M. fortuitum* 3; *M. chelonae* 2; *M. gordonae* 2.

Top |

Mycobacterium tuberculosis infections, England and Wales: laboratory reports, weeks 1-39/01

Number of reports received							Cumulative total for weeks 01-39	
	Male	Female	Not stated	Total for weeks			2001	2000
***M. tuberculosis* (disseminated)**				27-39	14-26	01-13		
All cases	403 (9)	318 (5)	58 (2)	779 (16)	562 (6)	616 (13)	**1957(35)**	**1625**
Site of isolate								
pulmonary (smear positive)	254 (49)	185 (37)	36 (5)	474 (91)	344 (108)	345 (150)	**1163 (349)**	**973 (222)**
lymph node	15	24	7	46	22	39	**107**	**101**
CNS (meningitis)	3(2)	8(3)	–	11 (5)	9 (8)	6 (11)	**26 (24)**	**20 (18)**
genitourinary	15	11	2	28	14	26	**68**	**42**
bone/joint (spinal)	3	4	1	8	6(2)	10 (2)	**24 (4)**	**18 (7)**
gastrointestinal/ peritoneal	8	5	2	15	11	16	**42**	**24**
non-pulmonary respiratory	24	13	–	37	26	40	**103**	**78**
abscess	37	13	3	53	28	37	**118**	**122**
other (unspecified)	52	60	8	120	105	99	**324**	**260**
M. africanum	–	–	–	–	–	–	**–**	**–**
M. bovis	7	1	–	8	–	–	**8**	**10**

Back to top

Last updated: 1 November 2001

Next update due: 6 December 2001

Contents

Common animal associated infections, England and Wales: laboratory reports, weeks 40-43/01

	Total reports for weeks 40-43/01		Cumulative totals for weeks 01-43	
Organism	**2001***	**2000**	**2001***	**2000**
*Borrelia bugdorferi*** #	50	42	171	279
*Leptospira hardjo*** ##	–	2	4	7
*Leptospira icterohaemorrhagiae*** ##	–	1	4	22
Leptospira other*** ##	2	3	18	10
Pasteurella haemolytica	–	–	3	3
Pasteurella multocida	19	18	242	192
Pastaurella pneumotropica	–	–	3	2
Pasteurella spp	4	1	60	47
Toxocara canis	–	1	–	3
Toxocara cati	–	–	–	–
Toxocara spp	–	–	3	3
Toxoplasma gondii	2	3	24	32
Toxoplasma spp	2	5	47	46

* 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 40-43/01

	Total reports for weeks 40-43/01		Cumulative totals for weeks 01-43	
Organism	**2001***	**2000**	**2001***	**2000**
Arbovirus	–	–	–	1
Dengue virus	–	1	–	4
Ascaris spp	12	7	99	99
Hookworm (unspecified)	8	4	48	58
Ancylostoma duodenale	–	–	–	–
Necator americanus	–	–	–	–
Leptospira spp	1	7	10	15
Hymenolepis diminuta	–	–	1	1
Hymenolepis nana	6	3	42	19
Hymenolepis spp	1	–	1	–
Schistosoma haematobium	9	3	45	55
Schistosoma intercalatum	–	–	–	–
Schistosoma mansoni	3	–	15	11
Schistosoma spp	2	4	30	31
Strongyloides stercoralis	4	2	25	13
Strongyloides spp	–	–	2	4

* provisional data

Back to top