

Communicable Diseases Bulletin

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24 hour contact numbers for Hunter New England Population Health

**4924 6477 Newcastle
6767 8630 Tamworth**

Hunter New England Health Service

Pertussis Cases Continue to Rise, Increasing the Risk to Infants

The Hunter New England area has seen a sharp increase in numbers of confirmed cases of pertussis (114 cases for January 2009 compared with 9 cases for January 2008). This increase is mirrored throughout NSW. Interestingly, other states and territories have not been as markedly affected. The disease is affecting all age groups (see page 3). A number of infants have required hospitalisation.

With such an increase in the community across all age groups, every new cough presentation investigation should include possible pertussis.

Parents of infants who have not yet received three pertussis-containing vaccines need to be extra vigilant for signs and symptoms in those close to them.

They also need to be extra assertive about excluding coughing adults and children from being in contact with their babies.

Both vaccine-induced and disease-induced immunity is not lifelong, so adults who are in close contact with young children should strongly consider the adult pertussis-containing vaccine (Boostrix™, Adacel™), particularly parents, grandparents, health care workers and child care workers.

Immunised children often present with less severe symptoms. The pertussis-containing vaccines do not give 100% protection against the disease, however having children vaccinated will often lessen the impact of the disease should a child contract it.

Infectious period

A case of pertussis is infectious until either:

- Completion of five days of appropriate antibiotic treatment - erythromycin, clarithromycin or azithromycin (*Therapeutic guidelines-Antibiotic 2006 v13 p 249 for dosage*).
- Duration of cough is >3 weeks.

A case with cough duration of >3 weeks does not require treatment.

Cases need to be made aware that the antibiotics do not alleviate the cough. The cough may persist for 3-4 months. This seems to be more so for those diagnosed later in the coughing period.

Contact prophylaxis

Prophylaxis medication and dosage is the same as for treatment. It is given to prevent the

spread of the disease to infants.

Therefore, prophylaxis is only recommended for the following contacts:

- All household members when the household includes any children <24 months who have not received three doses of pertussis-containing vaccines.
- A woman in the last month of pregnancy, regardless of immunisation status.

When a case attends a child care for >1 hour whilst infectious and where there are infants <12 months of age who have not received three pertussis-containing vaccines in their care group, then all children and adults in the care group should receive antibiotics, regardless of immunisation status. When this occurs, HNEPH will produce a letter for parents and staff to take to their GP with the recommendations.

Summer Surge of Salmonella

Key points:

- Foodborne outbreaks are more common during summer months.
- Ask patients with gastroenteritis about links to others with a similar illness.
- Consider stool collection for patients with gastro.
- Notify Population Health of suspected outbreaks of two or more linked cases.

An increase in foodborne illness is seen in the summer months each year. In Newcastle in December 2008, notification of two *Salmonella* cases of similar age from the same suburb allowed Population Health to detect a large outbreak involving 18 suspected and 15 confirmed *Salmonella* Typhimurium cases.

The 33 cases had all eaten at the same restaurant in the 1-4 days before illness onset, and many attended as part of a group booking. The restaurant served meals with a raw egg dressing and the suspected source of *S. Typhimurium* was eggs. Raw eggs are a common cause of *Salmonella* outbreaks in Australia. After raw eggs were removed from the menu, further outbreak cases were not identified.

The decision of GPs to collect stool specimens of patients with gastroenteritis contributed enormously to the detection and investigation of the outbreak. Laboratory characterisation confirmed that isolates from cases were indistinguishable from each other and from *Salmonella* isolated from the restaurant.

Early identification of this outbreak allowed for timely investigation and implementation of effective control and prevention measures.

Amended Legislation - Body Piercing and Tattooing Children

The *Childrens and Young Persons (Care and Protection) Act 1998*, which is administered by the Department of Community Services (DOCS), has been amended to include body piercing and tattooing of children.

In summary, a person must not perform body piercing on any part of the genitalia of a child, or the nipples of a child, with or without the consent of a parent.

A person must not perform body piercing on any other part of a child's body unless the person has first obtained the consent of a parent of the child, either in person or in writing.

Tattooing must not be performed on any part of a child's or young person's body unless the person has first obtained the consent of a parent of the child or young person, either in person or in writing.

Full details can be found at:

<http://www.legislation.nsw.gov.au/maintop/search/inforce>

No Swimming in Pools until 2 weeks after last diarrhoea symptoms

In recent years there have been a number of diarrhoeal outbreaks associated with swimming pools in NSW.

Illnesses can be spread by swallowing, breathing in or having contact with contaminated water from swimming pools. They cause a wide variety of symptoms, including gastrointestinal, skin, ear, respiratory, eye, neurologic and wound infections. The most commonly reported illness is diarrhoea.

Diarrhoeal illnesses can be caused by microorganisms such as *Cryptosporidium*, *Giardia*, *Shigella*, norovirus and *E. coli*.

In properly disinfected pools, chlorine takes less than an hour to kill most micro-organisms that can cause illness. However, chlorine can take longer to kill some microorganisms such as *Cryptosporidium spp*, which can survive for days even in a properly disinfected pool. When an infected person swims in a pool, the water can become contaminated and other swimmers may contract cryptosporidiosis.

To minimise the spread of *Cryptosporidium* the following advice should be given:

- Do not swim for two weeks after diarrhoea symptoms have subsided
- Shower/wash thoroughly with soap before swimming
- Do not swallow pool water
- Toilet trained children should use the toilet before entering pools and wear tight-fitting waterproof pants or swimming nappies at all times. Nappies should be changed regularly and hands washed thoroughly afterwards.

The **Clean Pools for Healthy Swimming** fact sheets are available for swimmers and pool operators. They include

information on *Cryptosporidium*, disinfection and faecal accident response.

Fact sheets can be downloaded from the NSW Health website at:

http://www.health.nsw.gov.au/PublicHealth/environment/water/water_spa.asp

This information was also published in the January 09 edition of the HNE Environmental Health Bulletin which is distributed to local government environmental health officers.

<http://www1.hnehealth.nsw.gov.au/hnepH/EnvironmentalHealth/index.cfm>

Confirmed Measles Cases in Victoria, NT, SA

Victoria, SA and NT have confirmed cases of measles resulting from an initial imported case. All have been in young people.

There are also a high number of cases in Europe.

General practitioners and practice nurses should be offering MMR vaccine to all those born after 1965 with no history of disease or no history of 2 doses of MMR vaccine. Immunisation status of all those planning to travel anywhere overseas should be discussed

It is not necessary to assess immunity.

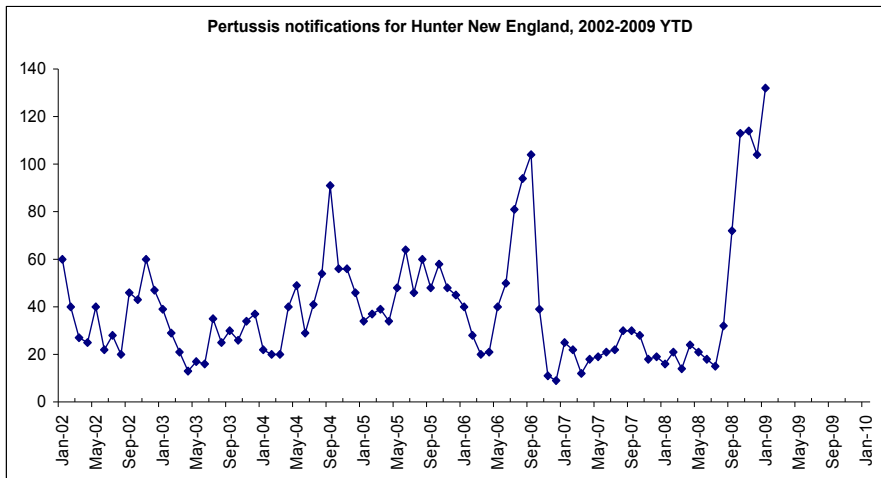
If people are unsure of their status, vaccinate as there is no increased risk of an adverse event for those with pre-existing immunity.

GP Notifications

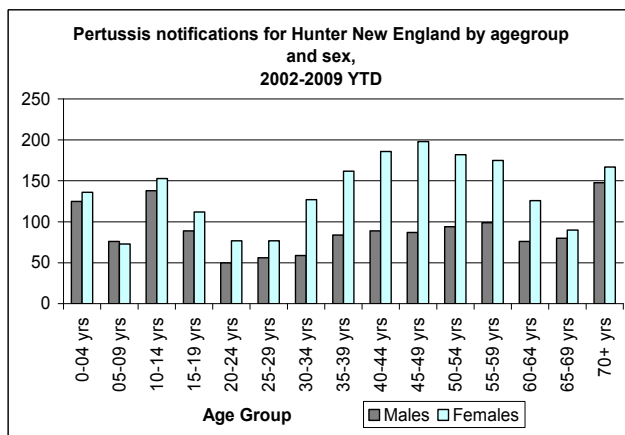
HNEPH staff wish to thank the following GPs for reporting presumptive cases of notifiable diseases during December 2008.

Fiona Boyd
Lisa Burgess
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Michael Longbottom
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Caitlin Raschke
Dr Shih
Chris Taylor
Alex Tonkin
Margot Woods

Pertussis



Pertussis Notifications			
LGA in clusters	2009 Year to date	2008 total	2007 Total
Mehi Cluster			
Moree Plains	0	2	6
Narrabri	2	4	2
Peel cluster			
Barraba	0	2	2
Gunnedah	1	1	0
Manilla	0	4	2
Nundle	0	1	1
Parry	3	7	2
Tamworth	15	31	24
Walcha	0	2	0
Upper Hunter cluster			
Merriwa	0	1	2
Murrurundi	0	0	0
Muswellbrook	0	3	4
Scone	0	2	1
Quirindi	0	0	0
Lower Hunter cluster			
Cessnock	11	28	11
Dungog	1	19	1
Maitland	30	61	9
Singleton	3	6	5
Lower Mid North Coast cluster			
Gloucester	0	4	1
Great Lakes	2	27	14
Greater Taree	12	21	22
McIntyre cluster			
Bingara	0	7	2
Inverell	4	2	9
Yallaroi	0	1	0
Tablelands cluster			
Armidale Dumaresq	4	7	3
Glen Innes	0	5	6
Guyra	0	0	0
Severn	0	3	1
Tenterfield	0	3	0
Uralla	0	2	4
Greater Newcastle cluster			
Lake Macquarie	27	132	67
Newcastle	17	85	44
Port Stephens	13	91	19
Grand Total	145	564	264



There has been a large increase in pertussis activity throughout HNE and NSW. The protection of infants remains the key public health objective. Priority measures include the immunisation of infants and adults / adolescents with regular close contact, and avoiding exposure to people with cough illness.

Timely vaccination is important. Doses should be given on time at 2, 4 and 6 months and again at 4 years. dTpa (eg Boostrix, Adecel) is given at 15 years of age and this will be offered to Year 10 students via the school-based vaccination program from 2009. GPs are encouraged to immunise all adolescents who missed their 15yo booster and can access free Boostrix vaccine for adolescents by phoning HNE Pop Health on 4924 6477. A single additional booster is recommended for anyone in regular contact with infants (including health care workers, child care staff, parents and grandparents).

PCR on a nasopharyngeal swab is the preferred investigation and can be used in the first 4 weeks of illness. Serology is of limited value and may remain positive for years after vaccination.

Suspected cases should immediately be notified to Population Health by phone, ideally with the patient still in the room.

Antibiotics may be recommended for high risk contacts to reduce further transmission and limit disease in the most vulnerable (details in October 2008 Bulletin). Options include erythromycin, clarithromycin and azithromycin.

To the Point

GPs can help curb the pertussis epidemic by stocking dTpa – Boostrix™ or Adacel™ – and develop a cost recovery system

To help protect infants from pertussis please consider maintaining a private stock of adult pertussis-containing vaccines. Speak to your drug supplier. This will reduce the inconvenience for your patients when you are promoting adult immunisation. Encourage all adults to be immunised against pertussis to protect vulnerable infants; in particular:

- new parents and grandparents
- soon to-be parents and their parents
- those who have a family member diagnosed with pertussis
- childcare workers and school staff
- 15 year-olds not in Year 10 or not at school.

Adult pertussis-containing vaccine has only been available since 2004.

Year 10 students will be offered a dTpa dose via the 2009 school-based program; GPs should give it to those who miss the dose at school (vaccine access via Population Health **Ph: 4924 6477**).

Children starting pre-school or day-care

Pre-school and day-care facilities are important places where diseases spread from one child to another! Vaccination can significantly reduce the risk of disease and every child commencing pre-school or day-care should be age-appropriately immunised at 2, 4, 6, 12 and 18 months and **especially 4 years**.

Happy Birthday 4 year-olds!

Four year-old boosters are often delayed! It is important that these are given on time at 4 years of age because the pertussis-containing vaccine given at age 6 months may not provide full protection beyond 4 years.

A reminder mail-out for all children 4-6 years who have not yet received their 4 year-old boosters would be a good strategy. MMR dose 2 is also important. This coincides with a new health check for 4 year-olds.

The ACIR national due & overdue rules changed as of 1 January 2009. A 4 year-old is considered overdue at 4 years and 1 month. This gives parents only one month to have their 4 year-old vaccinated or lose financial benefits. NSW Health has advised that they have raised the issue with the Commonwealth and any complaints from parents or GPs should be directed to the Central Office of the Commonwealth Department of Health and Ageing: **1800 020 103** OR Website: <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-central.htm>

Closing the gap strategy - Aboriginal immunisation

GPs and Practice Nurses, please:

- 1 Ask parents if their child is of Aboriginal or Torres Strait Islander origin.
- 2 Document either electronically or on the ACIR voucher