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HUNTER NEW ENGLAND
NSW HEALTH

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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

Bat Time of the Year

It is the time of the year when we expect to receive increased reports of bat bites/scratches from general practices and emergency departments. Australian bat lyssavirus (ABL) and rabies virus are members of the Rhadboviridae genus *Lyssavirus.* The clinical features of ABL are similar to rabies.

Members of the public should be actively discouraged from handling bats.

The Native Animal Trust Fund or wildlife service should be contacted to rescue injured bats. *Contact:* 0500 502 294 or contact your local wildlife rescue service

Should a person be bitten, scratched or have a mucous membrane exposure to bat saliva, the following steps need to be taken.

First aid treatment

- Wounds should be thoroughly washed with soap and water.
- Apply an iodine virucidal solution (eg Betadine).

Organise post-exposure treatment (PET)

Contact HNEPH by phoning Newcastle 4924 6477 or Tamworth 6767 8630. PET is free.

PET includes human rabies immunoglobulin (RIG) and rabies vaccine. (*see Australian Immunisation Handbook 9h edition pages 116-7).* The amount of RIG to be administered is determined by the patient's weight, (20 IU per kg) so this should be determined before phoning HNEPH.

As much of the RIG as possible is infiltrated around the wound with the remainder administered intramuscularly.

The 1st of 5 vaccine doses is given at the same time as the RIG. Other doses are due on day 3, day 7, day 14 and day 30.

Vaccine should be given in the deltoid area, as rabies neutralising antibody titres may be reduced after administration in other sites. In children, administration into the antero-lateral aspect of the thigh is also acceptable.

PET commenced overseas

Travellers to rabies endemic areas should be warned of the possible risk of rabies and discouraged from approaching or feeding local animals. Should PET be commenced overseas, the remaining doses of vaccine (and possibly RIG if not given and is within 7 days of 1st dose of vaccine) can be organised as above. NSW Health and Bali Medical Services recommend PET following exposure in Bali although it is listed *(The Australian Immunisation Handbook p119)* as rabies free.

Pre-exposure vaccine for those at increased risk

Native animal carers, vets, vet nurses and wildlife officers in Australia should be immunised prior to handling bats. The program consists of 3 IM or deep SC vaccines over a 28 day period *(The Australian Immunisation Handbook p112).* This program is not free. The vaccines can be obtained from CSL Vaccines.

Testing the bat

Providing there is no personal risk, the bat should be taken to a vet to be euthanised and forwarded to either Queensland Scientific Services or CSIRO's Australian Animal Health Laboratory (AAHL) for testing.

Terminating PET

Recent international research shows that an animal can be considered not infected with a lyssavirus (rabies or ABL) if its brain is examined for rabies and found to be negative on DFAT and PCR. In this situation PET need not be commenced or if already commenced, it may be terminated.

STOP PRESS: A man in Missouri died in November 2008 from rabies from a bat bite. This is the first death in the area since 1959. The man did not receive PET (*Reported ProMED Digest V2008#520).*

GP Notifications

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

Bronwyn Anderson	Max Maher
Alex Brown	Pat Mahoney
Susan Clarke	Peter Miles
Jillian Fenton	Caitlin Raschke
Robyn Fried	Peter Sargeant
Phil Hungerford	Neil Wearne
Angela Lam	

Have a Clear Indication for Testing for Hepatitis A

A recent study[1] reported high levels of false positive IgM results, particularly in older patients, regardless of which test kit was used. The authors recommend restricting serological testing to patients with epidemiological and/or clinical features of Hepatitis A.

A proportion of our community is immune, particularly those born before 1950 or those who have lived in endemic areas. Children can be asymptomatic or have a mild illness without jaundice.

Recently HNEPH has been notified of positive Hepatitis A IgM results by laboratories when patients do not fit the case definition in relation to clinical symptoms and/or risk factors.

Testing hepatitis A total antibodies measures IgG which will indicate past exposure and immunity.

The majority of cases of hepatitis A in HNE Area are individual cases that have occurred in unimmunised travellers. Other risk factors include contact with raw sewage, recreational drug use, consuming raw shellfish, male to male sexual contact, working with pre school children, attending child care and exposure to unclean water either by drinking and/or swimming.

Clinical features of hepatitis A

4-10 days prodromal stage:

- fever
- malaise
- anorexia, nausea, vomiting
- dark urine, followed by jaundice and pale faeces 1 or 2 days later

Epidemiological indicators

Contact between two people including a plausible mode for transmission:

- when one of them is likely to be infectious (from 2 weeks before onset of jaundice to 1 week after onset of jaundice)
- the other has an illness starting within 15-50 days after this contact
- at least one of the cases is laboratory confirmed[2]

If general practitioners suspect hepatitis A, it is recommended to notify HNEPH in order to commence a thorough investigation of contacts.

Hepatitis A vaccine recommendations[3]

Hepatitis A vaccine is not funded, but recommended for:

- travellers to endemic areas
- those working in rural and remote Indigenous communities
- child day care and pre school staff
- intellectually disabled individuals and their carers
- health care workers in specific high risk areas of work
- men who have sex with men
- sewage workers/plumbers
- injecting drug users
- patients with chronic liver disease

[1] Castrodale L. Fiore, A Schmidt T: Detection of Immunoglobulin M Antibody to Hepatitis A virus in Alaska Residents without Other Evidence of Hepatitis. Clinical Infectious Diseases 2005,; 41:e86-e88

[2] NSW Health (2004): Notifiable Diseases Manual .

[3] NHMRC (2003) The Australian Immunisation Handbook 9th edition. p139-48.

Forrest Gump, Bigger than Ben Hur

Exercise Forrest Gump (XFG) was conducted between 22-26 September 2008. Ostensibly it was a field exercise to test the Hunter New England Area Health (HNEAH) pandemic plans, but in reality, the scope was much broader. The scenario used in the exercise created pressure on some services and required the movement of surge staff from other departments. This introduced the need for training and orientation programs plus a coordinated workforce deployment approach.

Rolling out the exercise

During the exercise week, a case of suspected pandemic influenza presented at each ED and was evaluated against the NSW policy by a team of interstate and NSW Health evaluators.

http://www.health.nsw.gov.au/policies/pd/2007/pdf/PD2007_048.pdf

The ED's role included:

- appropriate case recognition
- patient isolation
- notification to the Population Health Unit (PHU)
- Infection control.

The area EDs achieved an overall score of 91% against the exercise sub-objectives. Overall, 89% of facilities scored between 80%-100% and the average grade for all evaluation questions was >80%.

A program is in place to provide feedback to EDs and address specific weaknesses.

HNEAHS conducted response activities from an Emergency Operation Centre, set up for the first time in the new Forensic Medicine Centre on the John Hunter Hospital campus. The HSFAC (Health Service Functional Area Coordinator) coordinated response activities from both the PHU (working from its own Emergency Operations Centre at Wallsend and coordinating activities from Taree and Tamworth branches) and Clinical Operations. The HSFAC had to react to the unfolding scenario which followed a highly realistic plot set within the early containment pandemic phase.

Surge staff

About one hundred surge staff were employed by the PHU, including 62 senior nursing staff who assisted with case assessment and contact tracing. Initial training was facilitated through a novel on-line training package. Their duties included handling 38 cases and tracing 172 contacts. During the process, full data collection was achieved and this guided a comprehensive planning response (data = information) which was used to forecast needs.

In keeping with reality, the Referral and Information Centre which routinely provides a telephone based community health service, handled 200 telephone enquiries from the 'public" over a five hour period. This team has previous experience in emergency response. Evaluation showed that they effectively responded to calls within an average time of less than five minutes.

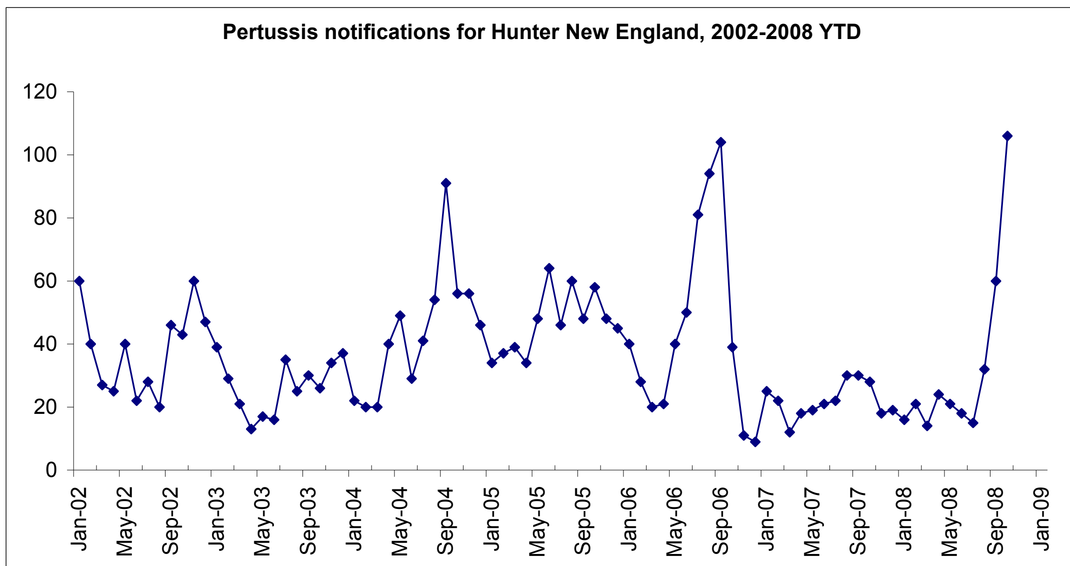
Future involvement with GPs

It is evident that in a large health emergency, GPs who will play a key role. HNEAH plans to further engage with GPs over the forthcoming year to develop collaborative local health emergency plans for fever clinics. The RACGP has produced an excellent pandemic toolkit to assist practice preparedness

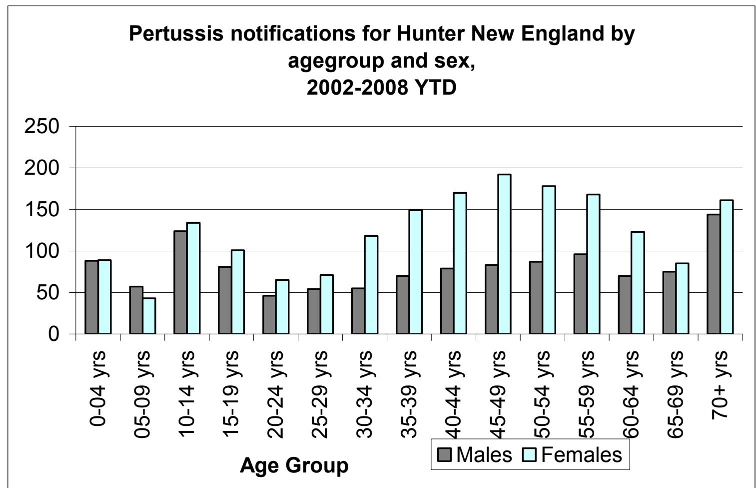
http://www.racgp.org.au/AM/Template.cfm?Section=Pandemic_resources_for_general_practices&Template=/CM/ContentDisplay.cfm&ContentID=28305

XFG identified many opportunities to improve emergency plans and routine systems. Implementation has commenced and will continue over the following months.

Pertussis



Pertussis Notifications			
LGA in clusters	2008 Year to date	2007 total	2006 Total
Mehi Cluster			
Moree Plains	2	6	26
Narrabri	2	2	7
Peel cluster			
Barraba	1	2	7
Gunnedah	1	0	7
Manilla	2	2	2
Nundle	1	1	2
Parry	3	2	12
Tamworth	21	24	38
Walcha	1	0	0
Upper Hunter cluster			
Merriwa	1	2	1
Murrurundi	0	0	1
Muswellbrook	2	4	7
Scone	1	1	3
Quirindi	0	0	0
Lower Hunter cluster			
Cessnock	22	11	23
Dungog	2	1	1
Maitland	36	9	22
Singleton	4	5	29
Lower Mid North Coast cluster			
Gloucester	3	1	2
Great Lakes	17	14	30
Greater Taree	14	22	43
McIntyre cluster			
Bingara	7	2	1
Inverell	2	9	20
Yallaroi	1	0	0
Tablelands cluster			
Armidale Dumaresq	3	3	22
Glen Innes	4	6	7
Guyra	0	0	2
Severn	1	1	1
Tenterfield	3	0	0
Uralla	1	4	0
Greater Newcastle cluster			
Lake Macquarie	102	67	110
Newcastle	59	44	62
Port Stephens	51	19	49
Grand Total	**370**	**264**	**537**



There has been a large increase in pertussis activity throughout HNE and NSW in recent months. 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

"Statement of Immunisation Support" for Practices to Display

We have received a vaccine policy statement supporting immunisation for practices to display. It is issued by the US Immunization Action Coalition and we believe it is a powerful statement in support of immunisation. It is available as a word document in order for facilities to personalise it. To access the electronic version go to this site: www.immunize.org/catg.d/p2067.doc

Vaccine Cold Chain

Summer Blackouts - Be prepared

With the increasing summer temperatures it is more likely that vaccine fridges will be exposed to higher ambient temperatures and blackouts are more likely due to storms and high energy demands. Where it is found that the cold chain has been compromised, recall of patients may be necessary.

Minimising the risk

- As NSW Health will not supply vaccines to facilities using bar fridges for vaccine storage, these should be replaced with a purpose built vaccine fridge or domestic non-cyclic frost free model.
- Map your fridge to find the hottest and coldest area of the fridge by placing a min/max probe on different shelves and storage compartments over a period of days. This does not include door shelves. Record temperatures and adjust the temperature control so that all readings are between 2-8°C. The min/max thermometers need to be in position and the temperature recorded daily whilst vaccines are being stored.
- Educate ALL members of staff, including non-clinical staff – to check the fridge temperature when walking past and report any concerns to the nominated staff member.
- Where possible place a vaccine fridge in a position that is not affected by high ambient temperatures – no fridge should be positioned on an external wall.
- Monitor and record fridge temperatures twice daily, preferably as soon as you arrive and just before leaving. This may result in some vaccines being able to be rescued before they are damaged by inappropriate temperatures.
- If using separate containers with lids for vaccine storage ensure each container has its own min/max thermometer.
- More frequent resetting of the thermometer following access to the fridge may be needed during summer months, due to higher ambient temperatures.

Storage of Vaccines in the event of Power Outages

- Keep vaccines in the fridge until the temperature has reached 8°C. In the meantime cool an esky before transferring vaccines and store in Esky unless the outage is prolonged, in which case alternative arrangements will be required.
- Enter an agreement with a nearby practice that is not on the same electricity grid to store vaccines during a prolonged outage.
- Have emergency transport containers and ice bricks available. Transport vaccines only in an emergency, and do so using eskies with a min/max thermometer.
- Bubble wrap is perfect for wrapping cold bricks so vaccines do not come into direct contact with bricks.
- As a last resort, it may be necessary for a staff member to take the vaccines home and store in the family fridge. In this situation min/max thermometers must be used and family members need to be instructed on reducing fridge door openings. Storing in a foam esky in a family fridge helps alleviate some of these issues. The thermometer sensor then needs to be inside the esky.
- If you cannot finance a purpose built vaccine fridge, a domestic fridge that is frost-free and non-cyclic is best.
- If your fridge temperatures swing widely from near 2°C to near 8°C, vaccines are safer if stored in containers within your fridge; each container should be monitored with its own min/max thermometer.

Are vaccines and loggers in the right place in your fridge?

- To ensure that your vaccines do to not freeze please place them at least 4cms from the back of your fridge
- When logging your fridge ensure that the data logger or min/max thermometer is at least 4cm from the back of your fridge

Immunisation Education Dates for 2009

Dates for 2009 will be on the HNE Immunisation website shortly at:

http://www1.hnehealth.nsw.gov.au/hneph/immunisation/immunisation.htm

Please remember it is the responsibility of all authorised immunisers to arrange attendance at an annual update. Download the registration form and fax it back to (02) 4924 6490.