

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**

HNEH Pandemic Influenza Exercise 22-25 September 2008

Exercise Forrest Gump (XFG) follows two previous Pandemic exercises (Cumpston and Paton) conducted in recent years. It aims to progress HNEH emergency preparations in general and influenza pandemic preparedness in particular.

XFG will exercise the management of the workload surge that can be expected during a protracted health emergency. The exercise will test public health surge staff training and educational resources developed to facilitate rapid training.

All 36 Emergency Departments in the Hunter New England Area will be required to show that they can safely handle people presenting with a highly communicable disease through triaging, stringent infection control and correct clinical management. The Population Health Unit will be challenged with 40 cases and 160 contacts...a burden in keeping with an early containment scenario. Ambulance transfers of 'pandemic' cases will add to the realism of the exercise.

During the exercise week the HNE disaster structure will be activated. Following the exercise, recommendations will be used to strengthen existing emergency systems.

Impact on GPs

Exercise Forrest Gump will not directly impact on GPs, although potentially, GPs who have VMO arrangements with their local ED may encounter 'pandemic' cases and the evaluation team. The 'pandemic' cases will be managed by the triage RN and doctors need only become involved if they wish. Should any real emergencies coincide with exercise activities, the exercise will be postponed in the affected site.

The Population Health Unit will maintain a prioritised service during the exercise week. Should you need to contact the Wallsend office you will encounter a menu-based telephone system. There will be options to direct you to immunisation and general enquiries, as well as to the exercise itself.

GPs play key roles in health emergencies and HNE is currently working with the five local GP Divisions to ensure that appropriate joint planning is progressed.

The Importance of discussing Suspected Measles with HNEPH Staff

To date in 2008, Hunter New England Population Health (HNEPH) staff have followed up over 30 cases of rash and fever presentations in young adults and children where measles or rubella were differential diagnoses. None of the cases were positive. The following is a modification of an article from the Communicable Diseases Bulletin, December 2007.

Measles and rubella are notifiable conditions by medical practitioners, hospitals, child care centre directors and school principals under the *Public Health Act 1991*. **It is important that general practitioners notify all suspected cases.**

The table (page 2) is a rapid assessment tool for a fever and rash presentation, to help in the diagnosis of measles. Please contact the nearest HNEPH office on **4924 6477 or 6767 8630** (24 hour call) to discuss a suspect case, as the rapid detection of cases allows implementation of appropriate control measures to minimise spread of infection to the susceptible groups, particularly unimmunised children. Measles-associated pneumonia, encephalitis, seizures and death are serious complications when they occur.

Measles is now a rare infection in Australia with only 11 cases confirmed in 2007 due to high vaccination coverage. However, this highly contagious viral infection can be introduced from other countries where immunisation rates are suboptimal. Measles is currently fairly widespread in the UK and other parts of Europe. A recent Eurosurveillance¹ reported outbreaks in Italy in young adults. It can easily spread in Australia if introduced from overseas amongst individuals that have no previous exposure or immunisation, as illustrated by the number of cases confirmed in Sydney recently.

Many practising Australian general practitioners (GPs) have never seen measles and the diagnosis of clinical measles can be difficult in the initial stages of the illness. Suspected clinical measles cases need to be immediately isolated until confirmed or proven not to be measles by laboratory testing, so that unnecessary exposure of other susceptible people is prevented.

¹Eurosurveillance Vol13 Issue 29 17 July 2008. Measles resurgence in Italy: preliminary data from September 2007-May 2008

Factors to be considered in determining whether a fever and rash presentation could be measles

1	Is the case appropriately immunised / immune? Children <4 years – MMR x 1, >4years MMR x 2 Adults born since 1966 - MMR x 2 Adults born before 1966 - considered immune	YES - less probability of measles NO - measles possible
2	Has the case travelled overseas in the last 2 weeks?	NO - less probability of measles YES - measles possible
3	Has the case been in contact with any other person with similar symptoms, particularly from overseas?	NO - less probability of measles YES - measles possible
4	Rash description and distribution see http://www.cdc.gov.au	Red blotchy, commencing on the face and becoming generalised
5	The timing of fever in relation to rash (SEE DIAGRAM)	High sustained fever (38-40°C) for 5-6 days with rash usually from the 3rd day
6	Other symptoms	Cough (important symptom), coryza, photophobia, conjunctivitis, Koplik spots

NOTE: With the high vaccination rate and the low number of cases of measles in Australia, if the above factors are: **1=YES, 2=NO, 3=NO, 4=different rash distribution and/or description, 5=temperature waning within 24 hours of commencement of rash, 5=no cough**, then it is unlikely to be measles but this can only be proven by appropriate laboratory testing.

Infectivity

The measles virus is a highly infectious and can remain viable in an enclosed space for at least two hours after the case has left. Thus waiting rooms and consultation rooms should ideally not be used for at least two hours after the case has left.

Consequently, all patients and those accompanying them in waiting rooms within that time frame, as well as surgery staff, need to be assessed for previous measles infection or a history of two MMR vaccines.

An important protective action in a general surgery is the isolation of any person that presents with fever and rash. All patients presenting with cough should be offered a mask to prevent droplet infection.

Differential diagnoses

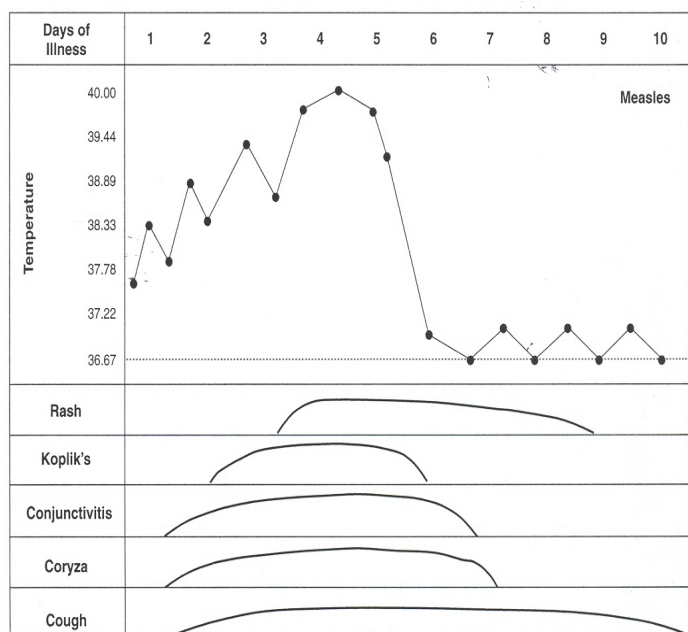
Many childhood viral illnesses are characterised by fever and rash, including the following.

- Roseola Infantum (AKA sixth disease, exanthem subitum)
- Erythema Infectiosum (AKA fifth disease, slapped cheek)
- Rubella: also rare in Australia, for the same reasons as measles. Only 34 cases in 2007
- Hand Foot and Mouth Disease (HFMD)

Clinical features and time course of measles

Source: Krugman et al (1992)

Published in Communicable Diseases Intelligence: Technical Report Series – Guidelines for the control of measles outbreaks in Australia; July 2000



GP Notifications

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

Peter Cook	Peter Mayers
Sandra Fisher	Anju Pandey
Robyn Fried	Sarabjit Ruba
Simon Holliday	B Zhang
Zaffer Hussain	

**Year to date (YTD) number of diseases notified to Population Health for residents of
Hunter New England Area – August 2008**

Disease	YTD: Number of notifications					Year Total: Number of notifications				NSW	
	Y2008	Y2007	Y2006	Y2005	Y2004	T2007	T2006	T2005	T2004	YTD	NSW2007
Blood Borne Virus											
AIDS	0	0	4	2	1	0	4	3	2	0	1
Hepatitis B - newly acquired	3	4	5	3	5	8	8	3	9	22	55
Hepatitis B - unspecified	46	34	43	52	47	61	72	87	69	1788	2531
Hepatitis C - newly acquired	3	5	2	1	5	7	6	4	6	12	49
Hepatitis C - unspecified	309	250	262	251	263	416	428	404	454	2734	3571
Hepatitis D	0	0	0	2	0	0	0	2	0	7	11

Gastrointestinal Disease											
Cryptosporidiosis	28	29	76	55	23	106	109	146	51	347	544
Giardiasis	129	148	129	111	105	226	210	181	145	1165	1940
Haemolytic uraemic syndrome	0	2	0	1	0	6	1	2	1	8	12
Hepatitis A	1	0	2	5	7	1	2	6	8	35	65
Hepatitis E	0	0	0	0	0	0	0	0	1	6	8
Listeriosis	0	2	4	5	1	5	7	6	1	25	22
Salmonellosis	149	167	151	134	166	268	240	225	251	1412	2539
Shigellosis	1	3	0	6	8	4	3	8	12	44	70
Typhoid and paratyphoid	0	1	0	0	0	1	0	0	1	22	33
Verotoxin producing E. coli	2	3	1	4	2	13	3	10	2	9	23

Sexually Transmitted Infection											
Chlamydial infection - genital	1253	1051	1122	972	869	1750	1857	1670	1442	8178	12191
Chlamydial infection - congenital	6	1	5	3	4	2	10	5	9	23	30
Gonococcal infection	73	26	50	53	42	85	74	106	69	770	1354
Syphilis	18	21	17	22	15	33	24	38	31	655	1071

Vaccine Preventable Disease											
Adverse events following immunisation	12	14	7	16	9	19	8	22	14	169	233
H. influenzae (type b) infection	1	0	0	0	1	1	1	2	1	7	7
Influenza	34	177	7	30	6	298	93	88	75	431	1909
Measles	0	1	1	0	0	1	1	0	0	38	4
Meningococcal disease - invasive	6	2	7	8	17	12	12	13	24	43	111
Mumps	0	1	3	3	1	6	3	4	3	54	318
Pertussis	126	143	294	306	231	264	537	561	524	2164	2094
Pneumococcal disease - invasive	37	46	48	46	71	82	86	88	129	296	520
Q fever	13	33	33	22	39	68	59	51	73	76	206
Rubella	0	1	1	2	0	1	1	3	0	9	9

Vectorborne Disease											
Arboviral infection	318	260	354	198	265	405	452	291	335	1345	1497
Barmah Forest virus disease	92	93	154	82	67	135	193	119	98	388	572
Dengue fever virus disease	8	2	1	1	3	3	2	3	5	72	80
Malaria	6	10	7	25	7	17	19	30	9	75	95
Ross River virus disease	218	165	199	115	193	266	257	169	228	882	842

Zoonoses											
Leptospirosis	3	2	8	6	9	2	10	11	20	8	9
Psittacosis	5	3	17	13	19	5	27	26	36	22	35

Other Conditions											
Creutzfeldt-Jakob disease	0	1	1	1	1	1	2	1	1	2	7
Elevated blood lead level	24	13	25	29	46	23	41	56	76	160	279
Legionnaires disease	4	6	5	2	3	9	10	4	3	49	105
Tetanus	0	0	0	0	0	0	0	0	0	1	2
Tuberculosis	6	12	10	12	5	19	12	15	13	173	455

To The Point

ACIR Immunisation Data as at 31 March 2008

NB: Percentages are based on children immunised within 90 days of a vaccine encounter falling due (at 2, 4, 6 and 12 months) as at 31 March 2008 and represent the previous four quarters of immunisation coverage.

Please see previous month's Bulletin for:

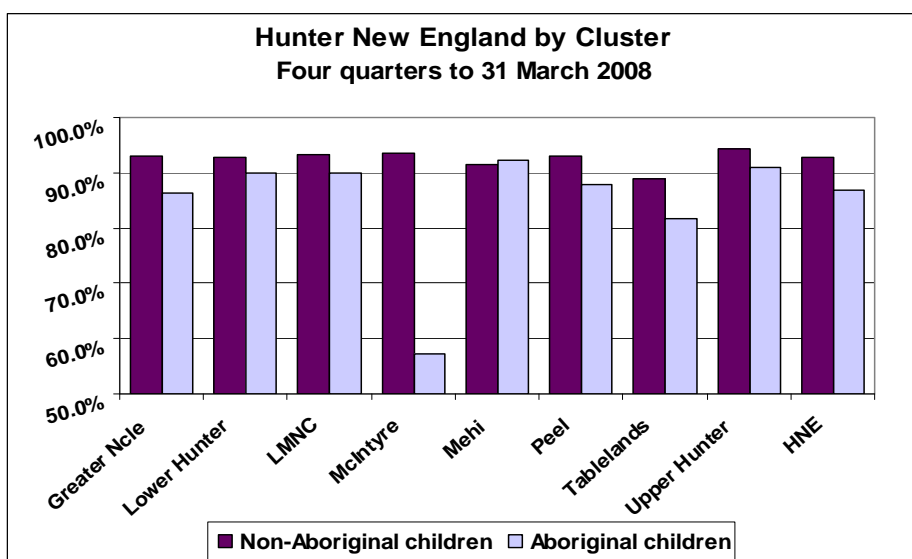
- Coverage rates for children aged 12-<15m by HNE Cluster
- Coverage rates for children aged 24-<27m by HNE Cluster

Children are due for vaccines at the age of four years. The figure below (Figure 1) demonstrates coverage rates for these vaccines are much lower than for two-year-old children.

In order to reduce the risk of contracting vaccine-preventable diseases at a time when children are at an increased risk (attending pre-school and school), a focus needs to be directed at ensuring that service providers and day-care / pre-school staff are aware of the recommendation for children to receive booster vaccines at the age of 4 years, and not older, as was the recommendation some years ago.

Strategies should include reminding parents opportunistically that these vaccines are due at 4 years of age. You will note that Aboriginal coverage rates are lower than non-Aboriginal rates in all clusters, with the exception of Mehi Cluster. It is important that service providers use every opportunity to ensure complete vaccination of Aboriginal and Torres Strait Islander children.

Figure 1: Coverage rates for children aged 60->63m by HNE Cluster



Coverage rate data between AHSs, NSW and Australia has for a decade demonstrated that HNE has led the state in overall coverage rates for all three age groups, and while this is impressive, our focus now must be to ensure that Aboriginal children benefit from the protection that immunisation gives when vaccines are administered on time.

As an example, Figure 2 indicates that HNE compares favourably with other Area Health Services (AHSs) and with state & national rates for the age group 24-<27 months for the quarter under consideration.

Figure 2: Coverage rates for children aged 24-<27 months comparing HNE with other Area Health Services, NSW and Australia

