

## COMMUNICABLE DISEASES for general practitioners and practice nurses

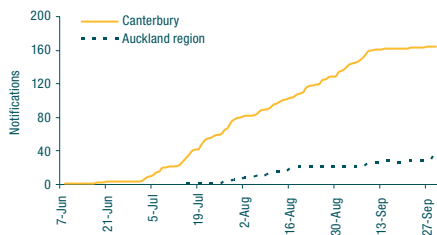
### Measles Outbreak In Canterbury

Recent measles outbreaks in New Zealand occurred in 1991 and 1997. Although over 2000 cases were identified during the latter outbreak, it was largely prevented by a mass MMR vaccination campaign. Since New Zealand's MMR coverage is the second lowest of all OECD countries and well below the 95% required for herd immunity, outbreaks from time to time are expected. Between February and April this year Otago had an outbreak of 34 cases.

The first case of the current outbreak in Canterbury was an unimmunised Christchurch secondary school student who was notified on 8th June 2009. There was no history of travel. Over the following weeks several more cases were notified followed by an outbreak of 13 cases who attended Christchurch Boys High School. Contact tracing was implemented for all cases but due to the time delay from onset of symptoms to notification, prophylaxis was not always possible. By the end of September there had been 164 confirmed and probable cases and 17 admissions to hospital.

**Figure 1**

Cumulative Sum of Measles Notifications In Canterbury and The Auckland Region\* 8 Jun-30 Sep 2009



\*Auckland, Waitemata, Counties Manakau DHBs

In July the outbreak spread to the North Island and by September, 17 other district health boards had cases. Apart from Canterbury, the three Auckland DHBs had the most cases (Fig.1).

### Management

In August measles information was faxed to general practitioners. Comprehensive details for diagnosing and managing cases and contacts was included and forms were provided to assist with notifying cases.

## October 2009

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## Public Health Canterbury

District Health Board

Te Poari Hauora o Waitaha

### Key messages:

- Measles should be notified promptly on suspicion.
- The only way of preventing measles is immunisation.
- A blood sample for serology should be taken from all suspect cases. Either a nasopharyngeal swab and throat swab or first morning urine sample for PCR should also be taken if within three days of the appearance of the rash.
- All children over 12 months should be offered a first MMR now followed by a second dose not less than one month later.
- All children who have not received a second MMR should be offered this as soon as possible (no sooner than one month following the first MMR).
- Infants aged 6-12 months in an outbreak situation may be susceptible to measles and can be offered an extra, earlier MMR vaccination followed by two further doses after 12 months.
- All adults born after 1969 who do not have a history of measles or documented measles vaccination need a single MMR as soon as possible, followed by a second dose one month later (people older than this are likely to have pre-existing immunity).

To assist with the population management of the outbreak a change to the timing of MMR was recommended.

### Instructions for the administration of MMR and changes to the timing of doses:

- Bring the two doses of MMR vaccine forward from 15 months then 4 years to 12 months then 13 months.
- Recall all children over 12 months who have not received an MMR vaccination as soon as possible and revaccinate 1 month later.
- Recall all children who have not received a second MMR as soon as possible (no sooner than 1 month following the first MMR).
- Recall all patients with questionable measles vaccine history.
- Infants aged 6-12 months can be offered MMR now, but will still require 2 further doses once they reach 12 months of age (3 doses in total). The Ministry of Health and the Immunisation Advisory Centre recommend that children in this age group receive MMR given the current rapid spread of measles in New Zealand.
- High-risk contacts (e.g. immunocompromised people, including pregnant women) can receive immunoglobulin if exposure was within 6 days. Each case for whom immune globulin may be indicated should be discussed with the local paediatrician or infectious diseases physician.

### Other issues

- The NIR will be adapted to cope with these changes.
- The other 15 month vaccinations (Hib and Pneumococcal) can be given at the same time as the first MMR i.e. from 12 months of age.
- If giving the 4 year MMR early the child will need to be recalled at 4 years for the DTaP-IPV vaccination.
- Egg allergy is not a contraindication to receiving MMR
- Live vaccines (such as MMR) are contraindicated in pregnant women. Although there is no evidence that vaccine

virus is transmissible to the foetus, it is a theoretical contraindication.

- The Ministry of Health and IMAC recommend ensuring those in contact with pregnant women are immunised.

The above public health advice remains in place at the time of writing. Doctors will be informed when there are further changes or a return to the previous immunisation schedule timing for MMR.

### Dramatic uptake of MMR

There has been an excellent response by Canterbury doctors to assist with the control of the measles outbreak by immunising children with MMR. By the end of September over 8,000 children aged 12 months to less than 4 years had received their MMR early because of the recommendation to bring forward MMR1 and MMR2. This included nearly 1,500 children aged 12 - 17 months who received their MMR1. As a result a 94% coverage of children at 2 years had been achieved.

### Influenza Pandemic 2009

Nationally, to the end of September there were 827 cases of swineflu H1N1 09 admitted to hospital and 17 deaths. Canterbury had

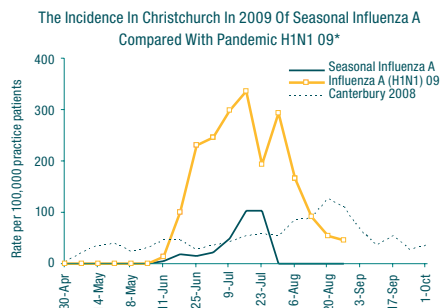
Figure 2



the third highest hospitalisation rate in New Zealand (Fig.2). A Christchurch telephone survey done in mid-August estimated that approximately 25% of persons had developed an influenza-like illness in the previous 10 weeks. Eighty-six percent of Canterbury influenza isolates this year were H1N1 09.

Figure 3 shows that swineflu caused six times the amount of influenza-like illness in Christchurch compared with seasonal influenza which again was relatively quiet contrary to expectations.

**Figure 3**



Canterbury coped remarkably well during the influenza pandemic, particularly when considering how other centres in New Zealand fared. Three factors were central to this success. Two of these factors were inter-related; the leadership that was demonstrated within the sector in Canterbury and the extensive planning that was done in recent years in anticipation of a pandemic. The third factor was the promotion of the public messages that encouraged people to manage the illness at home if possible. In this regard it has been estimated that of all persons in Christchurch who developed an influenza-like illness in June to early August, approximately six out of seven were able to manage at home without seeing a doctor. Planning for a future pandemic has already been initiated based on the lessons recently learned. Possible scenarios to be considered range from the return of H1N1 09 with similar characteristics to a novel virus with a high morbidity but a low rate of transmission.

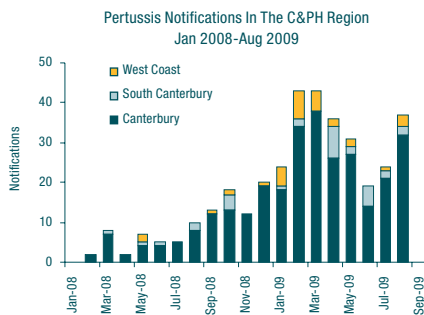
### Pertussis Update

The number of pertussis notifications began to increase at the beginning of 2008 and it

appeared as if it was the start of another epidemic. However the increase was not sustained and although notifications were significantly higher in 2009 than in 2008 the increase was irregular (Fig.4). Notifications were markedly lower during June and July.

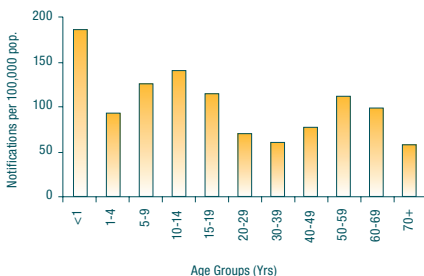
All three C&PH DHBs had more cases in 2009 than 2008 but all three had most notifications in the first six months of this year. The rates of disease were highest in the under 20 year olds; in Canterbury (Fig.5) and West Coast the age group with the highest rates were the under ones and in South Canterbury it was the 15-19 year old group.

**Figure 4**



**Figure 5**

Rates of Pertussis Notifications in Canterbury By Age Group Jan 2008-Aug 2009



## Infection Control Matter

### Infectious Patients Sent For Tests

A reminder that when an infectious patient is referred for investigation the doctor or practice nurse should telephone the pathology laboratory or radiology centre beforehand. This will enable precautions to be taken to minimize the risk of exposure to other patients and staff when that patient arrives.

## Norovirus And Notification

Norovirus is a perennial issue that has the potential to be very disruptive to rest homes and hospitals and distressing for patients. Clusters of acute gastroenteritis where a common source is suspected are notifiable and doctors are requested to notify promptly so that:

- action can be taken to prevent and contain the cluster/outbreak, and
- hospitals can be alerted about the situation and take precautions to minimise the risk to other patients.

All cases of notifiable enteric diseases should be reported promptly and the patients informed of the diagnosis as soon as possible to avoid the problem of public health staff

contacting the patients before they know their diagnosis. Delay in notification reduces the likelihood of complete information and successful preventive action.

## April And July Editions

There was no April or July edition due to the the pandemic response. This edition covers the major communicable diseases issues for the year so far and includes a summary table of notifiable diseases from January to September.

### Summary Of Selected Notifiable Diseases January - September 2009 & 2008

	Canterbury		South Canterbury		West Coast		TOTAL	
	Cases Jan-Sep 2009	Cases Jan-Sep 2008	Cases Jan-Sep 2009	Cases Jan-Sep 2008	Cases Jan-Sep 2009	Cases Jan-Sep 2008	Cases Jan-Sep 2009	Cases Jan-Sep 2008
<b>ENTERIC DISEASES</b>								
Campylobacteriosis	314	466	74	100	26	37	414	603
Cryptosporidiosis	48	83	12	32	4	7	64	122
Gastroenteritis	32	90	4		60	9	96	99
Giardiasis	126	148	9	11	10	17	145	176
Hepatitis A	4	3					4	3
Listeriosis	1	3					1	3
Paratyphoid	3	4					3	4
Salmonellosis	101	133	26	30	5	5	132	168
Shigellosis	10	5	1				11	5
Typhoid	1	1					1	1
VTEC	11	18	1	3	1	1	13	22
Yersiniosis	53	87	6	11	10	9	69	107
<b>OTHER DISEASES</b>								
AIDS								
Dengue Fever	7	7				1	7	8
Haemophilus influenzae b	1	1					1	1
Hepatitis B	3	5				2	3	7
Hepatitis C	10	2					10	2
Lead absorption	22	19	1	2			23	21
Legionellosis	8	6	1	1		1	9	8
Leptospirosis	4	13	1		4	2	9	15
Malaria	3	3				2	3	5
Measles	164	5	1			1	165	6
Meningococcal Disease	10	6		1	1	1	11	8
Mumps	11	13	2			1	13	14
Pertussis	238	44	24	3	5	26	267	73
Pneumococcal Invasive Dis*	41	*	6	*		*	47	*
Rubella	2						2	
Tuberculosis (new case)	19	17	2	1			21	18

\* Made notifiable in October 2008