

COMMUNICABLE DISEASES

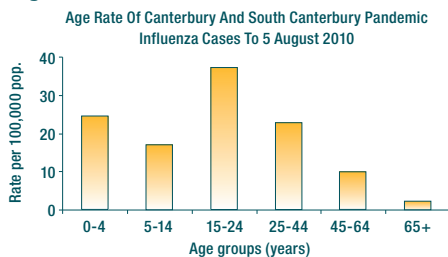
For general practitioners and practice nurses

2010 Influenza

Regional

The reappearance of influenza A H1N1-09 was later than expected and so far hasn't resulted in the dramatic increase in cases in Canterbury that characterised the beginning of the pandemic last year although the numbers of cases rose sharply in South Canterbury in July. West Coast had not had a confirmed case by the beginning of August. Areas that weren't particularly affected with the first wave have had a higher incidence this year. Early analysis by age group indicated that, as with last year, there were relatively few over 65 year olds affected. By the beginning of August there had been few hospital admissions in the region. Figure 1 shows the age rates of cases combining Canterbury and South Canterbury totals (44). [The latest surveillance results are available via the Canterbury Primary Pandemic Group website for those who have access to it.]

Figure 1



National

By June this year between 40-50% of the New Zealand population were thought to be immune to pandemic influenza from exposure last year (see National Seroprevalence study following) and immunisation this year. Pandemic influenza data to early August show there have been:

- 25 pregnant women notified of whom 19 were hospitalised
- 188 hospitalisations including 115 in July
- three deaths

July 2010 Contents

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Public Health Canterbury

District Health Board
Te Pōari Hauora o Waitaha

National Seroprevalence study

The national seroprevalence study was conducted to gain a better estimate of how many people were infected during the pandemic last year. 1696 serum samples and individual risk factor data by questionnaire were collected between November 2009 and March 2010. In addition 521 pre-pandemic sera collected during 2004 to April 2009 were used to establish baseline immunity.

The findings indicated that the pandemic virus was highly infectious. An estimated 29.5% of New Zealanders (1.3 million) had immunity to 2009 H1N1 at the end of the study period. An estimated 18% of the New Zealand population (800,000) were infected with the virus during the first wave including one child in every three. Older people had a high prevalence of pre-existing immunity which protected them against infection. Approximately 45% of seropositive individuals had no symptoms indicating a relatively 'silent' spread of the disease in a naive population.

Being a healthcare worker did not appear to increase the risk of infection compared to the general population. Pacific Peoples had

the highest seroprevalence in comparison to other ethnic groups.

Current management guidelines

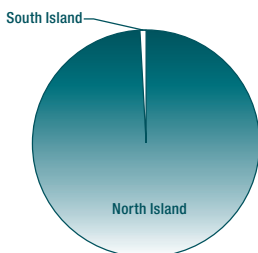
- National reserve antivirals can be accessed by all patients who are clinically assessed as requiring antivirals for treatment.
- Prompt assessment and consideration of antiviral treatment is especially important for people at greater risk of severe outcomes (including pregnant women and people with underlying medical conditions), people with more severe influenza illness, and people whose condition begins to deteriorate.
- Swabbing is not recommended unless a practice is participating in the surveillance programme, or it is required to guide management of an individual patient. Patients admitted to hospital with suspected H1N1-09 should be swabbed.
- Primary care staff should take appropriate infection control measures in the practice using masks and possibly streaming of infectious patients. Symptomatic patients should be advised on cough and hand hygiene, isolation and social distancing.

Rheumatic Fever

In the past 10 years there have been 1,136 cases of Rheumatic fever (initial attack) nationally but only 11 in the South Island (Fig. 2) of whom eight have been from Canterbury.

Figure 2

Rheumatic Fever Notifications In New Zealand 2000-2009



Since May 2009 there have been three boys notified in Christchurch aged 11-15 years. Two were of Maori ethnicity and the third was Maori/NZ European. Two presented with arthralgia but one had cardiac involvement with mitral and tricuspid regurgitation.

Ongoing management principally involves four weekly penicillin injections to prevent further attacks which carry the risk of cardiac damage, and prophylaxis prior to dental procedures to prevent endocarditis.

When the public health staff take throat swabs from contacts, results are sent to their doctor for any action that is required. Visits for injections are an opportunity to ask these patients about sore throats, aching joints and to remind them about dental hygiene and regular dental check ups.

The National Heart Foundation publish evidence-based best practice guidelines and algorithms on a variety of topics associated with Rheumatic fever including prophylaxis and the management of sore throat.

(<http://www.heartfoundation.org.nz>
>Resources>Health Professional Guides).

Swimming Pools And The Recent Cryptosporidiosis Outbreak

Christchurch swimming pools were implicated as amplifiers in the community-wide cryptosporidiosis outbreak earlier this year. In 18 days in March, 12 of 17 notified cases had been swimming in at least one of several Christchurch pools during the incubation time of their illness. Overall 44% of the 121 cases had swum in a pool in the five month long outbreak.

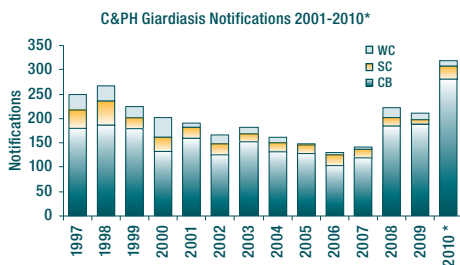
Prevention of a recurrence requires an increased awareness by the public, instruction of patients at the time of diagnosis and specific management of the swimming pools. C&PH are working with the Christchurch City Council to improve pool signage.

From a primary care perspective it is important that patients with infectious gastroenteritis are told not to swim in a pool while they have diarrhoea and for two weeks after. This will be particularly important over the coming spring months when the background incidence of cryptosporidiosis in the community is greatest.

Giardiasis Levels Elevated

The annualised rate for giardiasis notifications in Canterbury for January to July suggests that this year will have the highest number of notifications since it became a notifiable disease (Fig. 3). South Canterbury has also had an increase, with an annualised rate being the highest in the past 9 years. In contrast West Coast notifications have decreased.

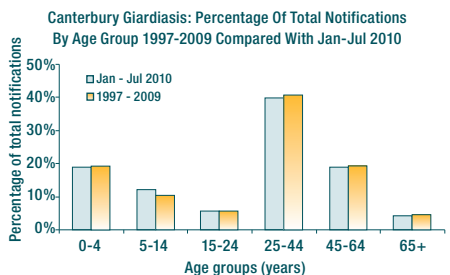
Figure 3



* Jan-Jul annualised

A comparison of risk factor exposures showed that 9% of cases this year had been swimming in a pool compared with 2% for the previous 13 years but there has been no outbreak due to a swimming pool. There were no relative differences in the age groups affected (Fig. 4). In 2010, 30% of Canterbury notifications were associated with household clusters compared with 34% for 2008-2009.

Figure 4



In South Canterbury the only risk exposure that was increased this year was that of farm

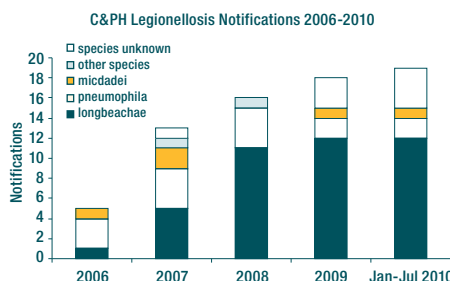
contact and occurred in 50% of notifications compared with 30% for previous years.

Legionnaires' Disease

Over the past 12 months Canterbury had the highest number of Legionnaires' disease notifications (23) of any DHB in New Zealand. South Canterbury had two notifications and West Coast four, over this time. Legionnaires' disease notifications in February, April and June were the highest ever recorded in the region.

The national incidence of the commonest species, *L. longbeachae* and *L. pneumophila* have been approximately equal in the last few years but in the C&PH region *longbeachae* has been the predominant species. In South Canterbury and West Coast the incidence ratio since 2000 has been 5 to 1. Since 2006 the percentage of notifications due to *longbeachae* has increased from 20% to 64% (Fig.5). *L. longbeachae* is associated with gardening and handling potting mix and compost.

Figure 5



Those most susceptible to Legionnaires' disease, which has a case-fatality rate of around 10-15%, are older patients especially those who smoke or have a chronic illness, or the immune suppressed. A close fitting dust mask should be worn when handling potting mix or compost.

Pertussis Decreases

From the last six months of 2009 to the first six months of 2010 there was a significant decrease in pertussis notifications nationally and in Canterbury (Table 1). The anticipated

epidemic has not eventuated for reasons unknown. Nationally to July there had been a total of 513 pertussis notifications (291 confirmed and 222 probable), 53 hospitalisations and no deaths.

Nasopharyngeal swabs are the recommended laboratory test - not serology.

Table 1
Pertussis notifications in New Zealand and the C&PH region July '09 – June '10

	NZ	CB	SC	WC
Jul-Dec '09	745	158	9	8
Jan-Jun '10	473	107	11	7

Notify Suspect Food Poisoning

Sometimes when doctors don't notify suspect food poisoning their patients do. Often in these circumstances there is a time delay with a resulting loss of opportunity to test the food.

Doctors are reminded that suspected food poisoning is notifiable for the following conditions: where there is a suspected common source or from a person in a high risk category (eg, food handler, early childhood serviceworker, etc) or single cases of chemical, bacterial, or toxic food poisoning such as botulism, toxic shellfish poisoning (any type) and disease caused by verocytotoxic *E. coli*.

Summary Of Selected Notifiable Diseases By District Health Board April - June 2010 and 2009

	Canterbury		South Canterbury		West Coast		TOTALS	
	Cases Apr-Jun 2010	Cases Apr-Jun 2009	Cases Apr-Jun 2010	Cases Apr-Jun 2009	Cases Apr-Jun 2010	Cases Apr-Jun 2009	Cases Apr-Jun 2010	Cases Apr-Jun 2009
ENTERIC DISEASES								
Campylobacteriosis	168	119	32	23	8	8	208	150
Cryptosporidiosis	54	20	2	3	-	-	56	23
Gastroenteritis	13	5	-	-	-	1	13	6
Giardiasis	59	40	10	2	1	4	70	46
Hepatitis A	2	1	-	-	-	-	2	1
Listeriosis	-	-	-	-	-	-	-	1
Paratyphoid	-	2	-	-	-	-	-	2
Salmonellosis	36	38	10	6	3	-	49	44
Shigellosis	5	-	-	-	-	-	5	-
Typhoid	1	-	-	-	-	-	1	-
VTEC	12	7	-	1	-	-	12	8
Yersiniosis	2	12	2	-	1	5	15	17
OTHER DISEASES								
AIDS	-	-	-	-	-	-	-	-
Dengue Fever	1	3	-	-	-	1	1	4
Haemophilus influenzae b	-	-	-	-	-	-	-	-
Hepatitis B	1	-	-	-	-	-	1	-
Hepatitis C	-	1	-	-	-	-	-	1
Influenza A H1N1 09	-	179	5	7	-	8	5	194
Lead absorption	13	9	-	1	-	-	13	10
Legionellosis	6	2	1	-	-	-	7	2
Leptospirosis	1	1	-	-	2	-	3	1
Malaria	2	-	-	-	-	1	2	1
Measles	-	3	-	-	1	-	1	3
Meningococcal Disease	-	1	-	-	-	-	-	1
Mumps	3	4	-	2	-	-	3	6
Pertussis	58	69	-	15	7	4	65	88
Pneumococcal Invasive Dis.	13	9	1	4	-	-	14	13
Rheumatic fever – initial attack	1	-	-	-	-	1	1	1
Rubella	-	1	-	-	-	-	-	1
Tuberculosis (new case)	6	3	2	-	-	-	7	3