

COMMUNICABLE DISEASES

For general practitioners and practice nurses

Pandemic Planning

Exercise Cruickshank

Exercise Cruickshank in May will be an opportunity for Health to work with other agencies in a 'whole of Government' response to test most aspects of pandemic planning. The exercise will run over four days: 10th, 16th, 17th and 23rd of May.

Day 1 will involve the airport, quarantine facilities and C&PH in 'keeping it out'. Modelling has indicated that it is theoretically possible to delay the entry of a pandemic influenza virus by rigorous application of certain interventions such as travel deterrence, exit screening by affected countries, entry screening at New Zealand's borders, the use of antivirals and quarantine. Current plans are to use hotels for quarantine accommodation.

Day 2 will exercise the DHB's and public health plans to 'stamp it out'. In the real situation all general practitioners would be alerted if there was the possibility of a case of pandemic influenza in the region.

Primary care, the DHBs and others will exercise plans for community based assessment centres during the 'manage it' phase on the 17th.

The last week of May will review how the community will recover from a pandemic.

Avian Influenza Update

By the end of January there had been 270 human cases globally of Avian influenza (Fig.1) resulting in 164 deaths (mortality rate of 61%). Last year Indonesia had the most cases (56) and the most deaths (46) of any country. Already this year Indonesia has had 6 cases confirmed including 5 deaths.

There has been a report that there is widespread infection of Indonesia's feline population. In a survey of 500 stray cats near poultry markets in four areas of

January 2007

Contents

- Pandemic Planning
 - Exercise Cruickshank
- Avian influenza Update
- A review of 2006
- Outbreaks in 2006
- Tuberculosis 2006
- Annual summary of selected notifiable diseases '06 and '05
- North Canterbury Immunisation
- Ethnicity and NHI details
- Summary of selected notifiable diseases Oct - Dec '06 and '05

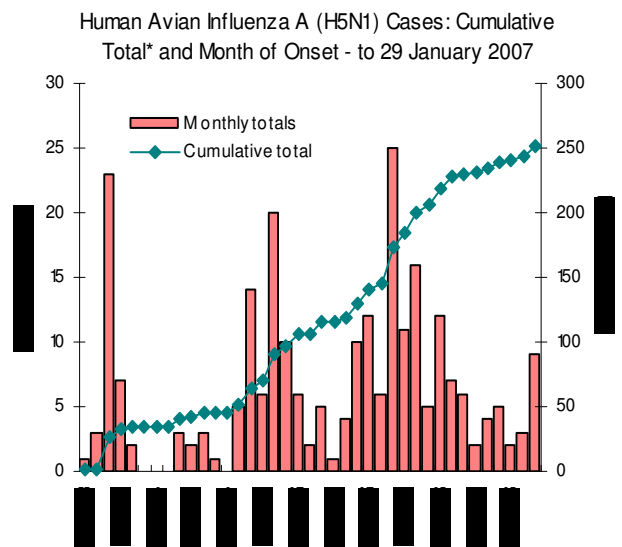
Public Health

Canterbury

District Health Board
Te Poari Hauora o Waitaha

Sumatra and Java, including the capital Jakarta, 20% of the cats had positive serology for H5N1. All these areas have had outbreaks of H5N1 in poultry and people. It is speculated that the infection rate was actually much higher as many of the infected cats had already died. The significance of these findings is that as the virus replicates in cats, it will further adapt to mammals and acquire the ability to spread more efficiently to people and from person to person.

Figure 1



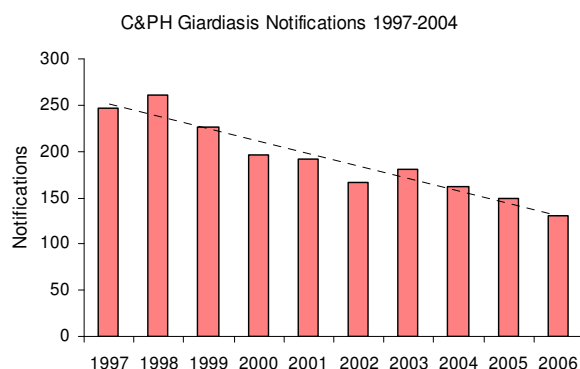
* Does not include 16 cases with an unknown onset date and 2 who were asymptomatic.

Review Of 2006

The high number of cases of **hepatitis A** were due to an outbreak from Dec '05 – Feb '06 and associated with a preschool in Christchurch. There were no further cases following an extensive vaccination programme in which 459 contacts received Havrix.

The annual numbers of notifications across the C&PH region for **giardiasis** have trended down, virtually since the disease became notifiable. This continued in 2006 (Fig. 2) despite South Canterbury and West Coast having small increases in their annual totals. All three health districts individually have shown a decrease since 1997.

Figure 2



Campylobacteriosis notifications however remained high. The regional total for 2006 was the second highest on record and was consistent with the notification pattern nationally. The rate of notified disease in the region was 442 per 100,000 population compared with 422 nationally. This situation prompted calls to replace fresh poultry, the main recognised source of human infection, with the frozen product as freezing substantially reduces *Campylobacter* levels.

For several years **salmonellosis** rates in South Canterbury have been amongst the highest in the country and 2006 was no exception. The rate of 70 per 100,000 population was twice that of Canterbury and over four times that of West Coast.

Most cases of salmonellosis only require rehydration. Inappropriate use of antibiotics may increase the risk of a carrier state and the development of resistance although in certain cases eg. the elderly and immunocompromised, antibiotics may be indicated.

In 2005, 93% of *Salmonella* tested in a New Zealand sample were fully susceptible to all 12 antimicrobials. Isolates of cases of salmonellosis acquired overseas were more likely to show resistance. Seek microbiological advice on management if in doubt.

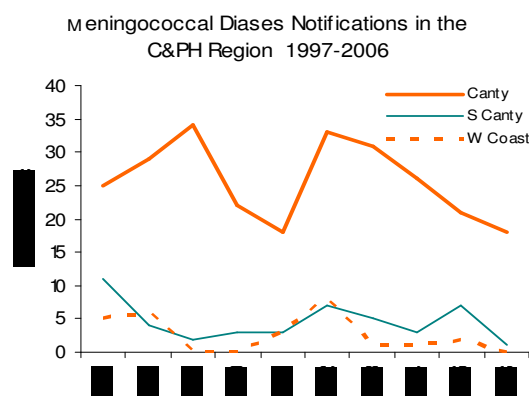
In December an elderly man in South Canterbury was notified with **listeriosis**. He was the first case notified in the C&PH region since 2002 and only the seventh in South Canterbury since 1997. Over this time Canterbury has had 16 cases notified and West Coast none. Health promotion targeting high risk groups and food safety programmes presumably have contributed to this sustained decrease.

In Canterbury **hepatitis B** notifications increased from eight to 16 but none were children. The average age was 37 years (range 20 – 47 years) and included 10 males. Six persons were of 'Other' ethnicity. Only the acute condition is notifiable.

There was just one case of **haemophilus influenza type b** disease notified in 2006, an 82 year old man from South Canterbury. Prior to the introduction of the Hib vaccination *Haemophilus influenza type b* was the commonest bacterial meningitis in children aged between 2-5 years.

There was a decrease in **meningococcal disease** notifications both regionally (Fig. 3) and nationally. In 2006 there were 19 cases across the three health districts compared with 30 in 2005. Nationally in 2006 there were 158 notifications including seven deaths compared with 229 cases and 14 deaths in 2005.

Figure 3



Pertussis notifications fell throughout 2006. In the last quarter of 2006 there were 41 in the C&PH region (38 in Canterbury) compared with 125 (103 in Canterbury) in the first quarter.

Outbreaks in 2006

Norovirus was responsible for 45 gastroenteritis outbreaks in the C&PH region last year affecting 1,363 people (1035 in Canterbury). Thirty-eight of the outbreaks were in institutions (hospitals or rest homes). One outbreak affecting 31 people was associated with a bus tour on the West Coast. Other outbreaks were due to *hepatitis A* (27 cases in 2006), *streptococcal group A* (8 cases in a ward), *Giardia* (14 cases), *rotavirus* (22 cases) and verotoxin producing *E.coli* (6 cases in a family).

Tuberculosis 2006

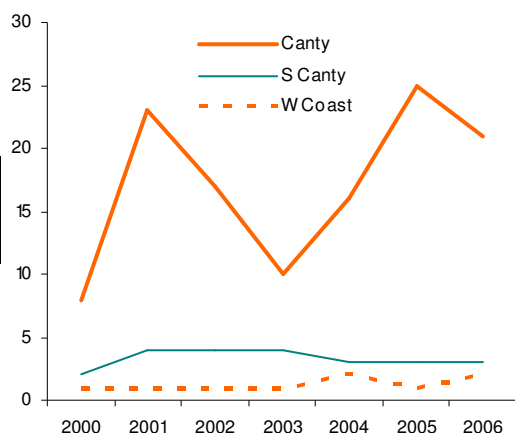
Further to the item in the October PHIQ on tuberculosis, in Canterbury last year, there were 21 cases (average age 41 years, range 14 – 82 years). Ten cases were extrapulmonary, and 15 (70%) were of Other ethnicity and born outside of New Zealand. One contact was diagnosed with tuberculosis, but was not thought to have been infected by the case but rather to have contracted the disease in their country of origin. A review of notifications since 2000 (Fig. 4) shows a steady pattern of low level of notifications for both South Canterbury and West Coast although the average notification rates across the region for the past seven years were very similar: 3.6 per 100,000 population for Canterbury, and 4.2 for both South Canterbury and West Coast.

Annual Summary Of Selected Notifiable Diseases 2006 and 2005

	Canterbury		South Canterbury		West Coast		TOTAL Cases 2006
	Cases 2006	Cases 2005	Cases 2006	Cases 2005	Cases 2006	Cases 2005	
ENTERIC DISEASES							
Campylobacteriosis	1777	1871	404	502	73	88	2254
Cryptosporidiosis	64	93	64	68	16	15	144
Gastroenteritis	137	104	3	7	5	5	145
Giardiasis	104	129	21	16	5	4	130
Hepatitis A	28	12	1	-	-	1	29
Listeriosis	-	-	1	-	-	-	1
Paratyphoid	-	2	-	-	-	-	
Salmonellosis	140	171	52	47	5	7	197
Shigellosis	9	12	-	4	1	-	10
Typhoid	-	2	-	2	-	-	
VTEC	15	12	4	4	-	1	19
Yersiniosis	84	64	18	14	9	16	111
OTHER DISEASES							
AIDS	8	3	-	-	-	-	8
Dengue Fever	2	1	-	-	-	-	2
Haemophilus influenzae b	-	2	1	-	-	-	1
Hepatitis B	16	8	2	-	-	-	18
Hepatitis C	13	15	1	-	1	-	15
Lead absorption	15	5	1	3	-	-	16
Legionellosis	4	28	2	2	-	1	6
Leptospirosis	6	2	6	7	2	4	14
Malaria	2	2	1	1	1	-	4
Measles	7	3	-	1	2	3	9
Meningococcal infection	18	21	1	7	-	2	19
Mumps	6	8	1	1	-	1	7
Pertussis	288	877	35	244	16	28	339
Rubella	1	1	-	-	-	-	1
Tuberculosis (new case)	21	25	3	3	2	1	26

Figure 4

Tuberculosis Notifications (New Cases) In the C&PH Region 2000 - 2006



North Canterbury Immunisation Co-ordinators

There have been changes in the staff and contact details for North Canterbury Immunisation. The co-ordinators are Lyn Smith (manager), Glenys Murray and Jayne Thomas. They can be contacted by phone on (03) 386 2773 or (03) 386 2775 or fax (03) 386 2774.

Ethnicity And NHI Details On Notifications

Practice nurses and doctors who notify are requested to ensure that a person's ethnicity and NHI number are included in the notified details. Ethnicity details enable health funding to be targeted to the groups with the greatest need.

Summary Of Selected Notifiable Diseases October – December 2006 and 2005

	Canterbury		South Canterbury		West Coast		TOTAL Cases Oct-Dec 2006
	Cases Oct-Dec 2006	Cases Oct-Dec 2005	Cases Oct-Dec 2006	Cases Oct-Dec 2005	Cases Oct-Dec 2006	Cases Oct-Dec 2005	
ENTERIC DISEASES							
Campylobacteriosis	501	579	99	107	28	30	628
Cryptosporidiosis	24	44	23	15	5	4	52
Gastroenteritis	44	12	3	1	3	-	50
Giardiasis	27	30	6	5	1	-	34
Hepatitis A	-	8	-	-	-	-	-
Listeriosis	-	-	1	-	-	-	1
Paratyphoid	-	-	-	-	-	-	-
Salmonellosis	27	34	9	10	-	2	36
Shigellosis	1	3	-	2	-	-	1
Typhoid	-	-	-	1	-	-	-
VTEC	4	5	1	-	-	-	5
Yersiniosis	37	22	4	2	1	2	42
OTHER DISEASES							
AIDS	1	1	-	-	-	-	1
Dengue Fever	1	-	-	-	-	-	1
Haemophilus influenzae b	-	-	-	-	-	-	-
Hepatitis B	2	5	1	-	-	-	3
Hepatitis C	5	3	-	-	-	-	5
Lead absorption	1	1	-	1	-	-	1
Legionellosis	3	8	1	1	-	-	4
Leptospirosis	-	1	1	1	-	-	1
Malaria	-	-	-	1	-	-	-
Measles	2	2	-	-	1	-	3
Meningococcal infection	2	3	-	2	-	-	2
Mumps	2	-	-	-	-	-	2
Pertussis	38	227	3	60	-	1	41
Rubella	1	-	-	-	-	-	1
Tuberculosis (new case)	5	8	-	-	1	-	6