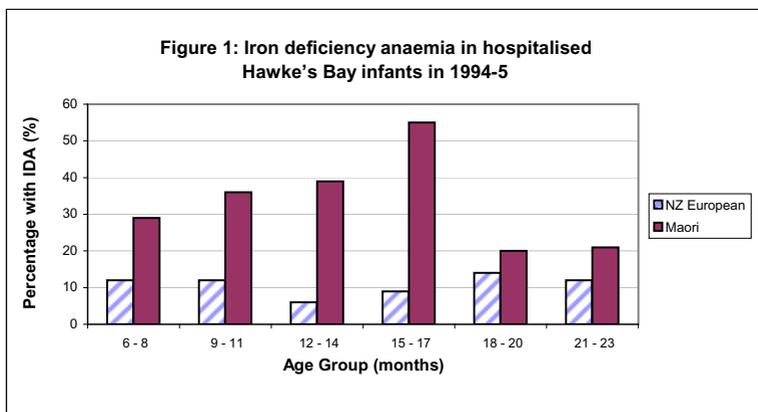


## Iron deficiency anaemia

Iron deficiency impairs mental and social development in growing infants and if sufficiently severe causes anaemia.

Three population studies over the last seven years have estimated that between 13 and 23% of urban New Zealand children less than three years of age have iron deficiency anaemia. The national children's nutrition survey (2002) estimated that 6.6% of New Zealand children between five and 14 years of age had an inadequate intake of iron from their diet.

The prevalence of iron deficiency anaemia in a series of hospitalised Hawke's Bay infants was found to be six times higher for Maori than Europeans (figure 1).



Risk factors include low socio-economic status, Maori or Pacific Island ethnicity, prolonged breast-feeding, early introduction or increased consumption of unmodified cows milk, decreased frequency of red meat consumption, consumption of tea and the use of weaning solids low in iron.

In the Hawke's Bay study a few infants had been fed unmodified cow's milk before the age of three months and some 65% of the group were being fed cows milk at interview (median age at interview was 14 months). 18% of these infants had substances added to the milk, mostly a chocolate powder such as Milo but no tea or coffee was used in this age group. Iron intake estimated from

food diaries suggested that it was below the daily recommended requirements.

Every attempt should be made to encourage and support breast feeding of all infants. For healthy term infants a weaning diet containing reasonable amounts of iron should be introduced at around four to six months. Unmodified cows milk should not be given to infants less than a year of age. Their requirements for milk if they are no longer being breast-fed should be met by appropriate milk formulae fortified with iron. Prolonged breast-feeding has been noted to be associated with iron deficiency mostly in situations where an adequate and increasing weaning diet containing iron rich foods has not been introduced. Prolonged ingestion of large volumes of milk even of the iron fortified type is inappropriate in children getting near a year of age who will be satiated and not keen on having solids in addition.

Premature babies are at much higher risk of iron deficiency (and other deficiencies) than children born at term and require added supplements including iron for much of the first six months of life. Paradoxically the better these small children grow, the more likely are they to run out of iron supplies and there should be a low threshold for doing haematological investigations in such babies.

*Invited contribution from Dr D Barry, paediatrician, Hawke's Bay Hospital*

## Influenza outbreak in schools

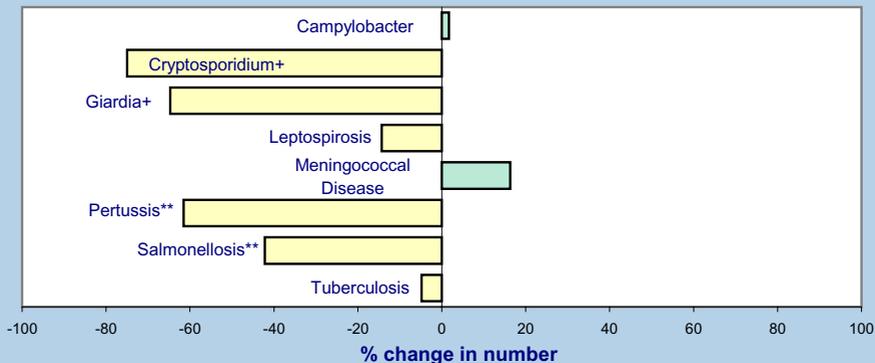
Anecdotal reports of illness absenteeism led to a survey of Hawke's Bay schools at the end of May. 94/143 schools responded (66%). 94% of the responding schools had noticed student absenteeism with 45% having more than 10% of the roll absent. The onset of absenteeism peaked in the 3rd week of May. The principal symptoms were gastro-intestinal and respiratory. 0/5 faecal samples were negative for bacterial pathogens and norovirus. 2/6 throat swabs were positive for influenza B, a virus which has been epidemic in schools in Wellington and other districts. National and local influenza surveillance shows that the winter epidemic began in May. GPs are asked to be aware that community-acquired pneumonias may occur in school- aged children as a complication of influenza. Influenza vaccination is available but not funded routinely for all children. Children transmit the infection to groups who are at high risk of complications of influenza and these groups are eligible for free vaccination until 31 July. <http://www.influenza.org.nz/>

## Commentary on disease surveillance summaries

**Pertussis** rates are low compared to the average for the same time period in the past five years. Hawke's Bay rates are low compared to New Zealand. The reason why the epidemic has not yet spread significantly to Hawke's Bay is not known.

## Disease surveillance summaries

**Selected Hawke's Bay disease notifications for December 2004 to May 2005 compared to the average for the same period during 1999-2003**



Note: +denotes  $p < 0.001$  ^denotes  $p < 0.005$  \*\*denotes  $p < 0.05$

**Selected notifications June 2004 to May 2005**

Disease	Hawke's Bay		New Zealand	
	Cases	rate*	Cases	rate*
Campylobacter	416	279.0	11970	320.3
Cryptosporidium	26	17.4	747	20.0
Giardia	55	36.9	1371	36.7
Hepatitis A	1	0.7	37	1.0
Hepatitis B	0	0.0	41	1.1
Lead Absorption	1	0.7	84	2.2
Leptospirosis	17	11.4	88	2.4
Meningococcal Disease	17	11.4	320	8.6
Paratyphoid	2	1.3	25	0.7
Pertussis	28	18.8	4282	114.6
Rheumatic Fever	5	3.4	76	2.0
Salmonellosis	47	31.5	1182	31.6
Shigella	0	0.0	142	3.8
Tuberculosis	19	12.7	387	10.4
Typhoid	0	0.0	32	0.9
VTEC/STEC Infection	5	3.4	99	2.6
Yersinia	15	10.1	358	9.6

\* Annualised crude rate per 100,000 population calculated from 2004 estimated resident populations.

## Immunisation issues

### *Coming events*

To register, contact Marg Dalton, Immunisation Coordinator, Phone 8341815 ext. 4228

**Vaccinators training course:** 18-19 August 2005.

Venue: Saint Andrew's Hall, Atawhai, Taradale. Cost \$50.

**Information sharers' course:** 8 August 2005.

This is a one day training course for health and community workers who assist with promotion of immunisation.

Venue: Culinary Capers, Pirimai Plaza, 73 Bill Hercock St, Napier. Cost \$25.

**Update for authorised vaccinators:** 9 November 2005.

### *Adding MeNZB™ to the immunisation schedule*

Six week old babies are now eligible to start the MeNZB™ programme. IMAC recommends all three injections (DTaP-IPV, Hib-Hepatitis B, MeNZB™) be given at the one visit. You have been sent a handout giving advice on this change of procedure. Please ring us if you would like another copy.

- MeNZB™ vaccination should be given in a separate limb to other vaccines.
- The vastus lateralis muscle on the lateral thigh is the recommended site for IM vaccines in children less than 12 months of age.
- When two injections are to be administered into the same thigh, divide the upper leg into thirds. The first of the two injections should be given 1cm above the junction of the upper and middle thirds. The second injection 1-2 cm below the junction of the upper and middle thirds.
- The vaccinator must document the site of each vaccination including whether upper or lower for those administered in the same limb.
- The angle of the needle should be closer to 90 degrees than 70 degrees.
- Administering multiple vaccinations at a single visit is advised to prevent the risk of delayed or missed vaccinations.
- Decision to defer vaccination should be made by the parent, only after they have been informed about the high risks of vaccine-preventable disease to very young infants.
- If parents decline to have three vaccinations in one visit, priority should be given to DTaP.
- If vaccines are not administered simultaneously, there is no minimum interval necessary between the administration of the routine schedule vaccines and MeNZB™ (i.e. could be the next day). However, for MeNZB™ vaccines there should be a minimum of four weeks interval between dose one and two, and a minimum of six weeks interval between dose two and three. Timing of recall should fit into these parameters.

## Travel advice

The public health unit no longer provides individualised health protection advice to overseas travellers. International travel is no longer confined to the fit, healthy and young.

Prospective travellers may have complex health needs and already be taking several medications. They require individual attention and detailed health care advice based on their individual medical condition(s) and travel needs.

We encourage callers to contact a general practitioner and to review information on the following reputable websites.

- [www.travel-essentials.co.nz](http://www.travel-essentials.co.nz)
- [www.who.int/ith](http://www.who.int/ith)
- [www.cdc.gov/travel/index.htm](http://www.cdc.gov/travel/index.htm)
- [www.moh.govt.nz/sars](http://www.moh.govt.nz/sars)
- [www.moh.govt.nz/birdflu](http://www.moh.govt.nz/birdflu)
- [www.fco.gov.uk](http://www.fco.gov.uk)
- [www.fitfortravel.scot.nhs.uk](http://www.fitfortravel.scot.nhs.uk)
- [www.tripprep.com](http://www.tripprep.com)
- [www.worldwise.co.nz](http://www.worldwise.co.nz)

## *Safety and security overseas*

### **DFAT, Aust./MFAT, NZ**

[www.dfat.gov.au](http://www.dfat.gov.au)

[www.mft.govt.nz/travel](http://www.mft.govt.nz/travel)

### **USA-CIA World Fact Book 2002**

[www.odci.gov/cia/publications/factbook/index.html](http://www.odci.gov/cia/publications/factbook/index.html)

### **USA-US State Department Travel Advisories**

[www.travel.state.gov](http://www.travel.state.gov)