BORD SLÁINTE
AN MHEÁN-IARTHAIR

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Pertussis (Whooping Cough)

Five laboratory confirmed cases of pertussis have been identified in the Mid-Western region since May 27th (one serologically confirmed and four culture positive). These figures are striking when compared with Mid-Western Regional Hospital Laboratory data since 2000 - no positive culture in 2000 and one per year in 2001, 2002 and 2003, and four positive serology results in 2000, none during 2001, six in 2002 and none in 2003.

The confirmed cases have been aged 18 years, 4 years, 6 years, four-and-a-half months and seven weeks. There have been an additional ten clinically suspected cases aged between one and 18 years. Two of the confirmed cases and seven of the suspected cases are from Clare. In Limerick there were three confirmed cases. There were three suspected cases in North Tipperary. One had two doses and two are known to have had three doses of pertussis containing vaccine. Nine have not received any pertussis containing vaccines. The immunisation status of the other three is unknown. Pertussis causes prolonged coughing spells. Children often "whoop" or vomit after a spasm of coughing. The infection is most severe in young babies who can become exhausted by the coughing and have difficulty in feeding and breathing. Illness may last two months or more and rarely, in severe cases, can result in brain damage. It is recommended that affected children should not attend school, crèche or summer camp/school until they have finished a 5-day erythromycin course and are well enough to return. Non-immunised contacts and those under two months of age may also benefit from prophylactic treatment with erythromycin. Parapertussis is a similar illness but symptoms are usually milder.

The recommended specimen for the culture of *Bordetella pertussis* or *Bordetella parapertussis* is a nasopharyngeal aspirate. However for practical purposes a per-nasal or post-nasal swab is usually done. Cough plates are not recommended. The optimal time for specimen collection is at onset of symptoms and before anti-microbial treatment is initiated. Swabs should be transported in the charcoal based transport medium provided with the Pertussis swabs. (These are available on request from the Mid-Western Regional Hospital Microbiology Laboratory). Bordetella serology is also recommended as only approximately 60% of clinical cases yield organism growth.

Vaccination provides the best protection for all children between two months and seven years of age, however immunity wanes after five to ten years. Even if a vaccinated child does get the infection, it is likely to be less severe than in one who is not vaccinated. Pertussis is included in the five-in-one vaccine usually given at 2 months, 4 months and 6 months of age under the Primary Childhood Immunisation Programme (PCIP) available free from General Practitioners and also the four-in-one booster given at 4 to 6 years.

Measles

Data from the National Disease Surveillance Centre indicates a surge in measles in the summer of 2004. The majority were reported in the Eastern Regional Health Authority. Nearly 200 cases of measles have been notified in Ireland up to July 2004. In the MWHB, seven measles cases were notified during this period. Two were from the Clare area, three were from the Tipperary North/East Limerick area and two were from the Limerick area. Except for one case in an eleven year old, the others were about 12 months old or younger (no date of birth was provided in one case). This is equivalent to a crude annual rate of 2.1 case per 100,000 population in the MWHB compared to 2.3 cases per 100,000 nationally (excluding the ERHA). The ERHA measles rate was almost 10/100,000.

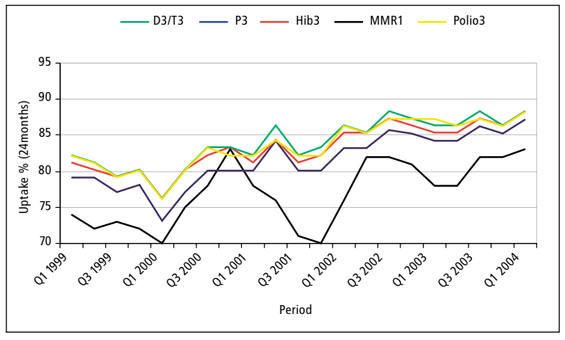

Figure 2: Vaccination uptake at 24 months in the MWHB for the PCIP covering Diphtheria, Tetanus, Pertussis, Hib, Polio and Measles, Mumps, Rubella (MMR) vaccines.

Lead the way, keep nits at bay...

Public Health on the Web

The MWHB publish regular updates on public health and communicable disease via the website **www.mwhb.ie** under the "Health Services" section. This provides data on tuberculosis, bacterial meningitis, influenza and gastroenteritis. It also provides updates on weekly reports of disease and updates on projects pertinent to the mid-west area.

We would welcome any feedback on this channel of communication or on the newsletter "**ID-Link**". Contact details are on this publication and on the website.
www.mwhb.ie

Outgoing EU Commissioner, David Byrne has published a paper "Enabling Good Health for all - a reflection process for an EU Health Strategy"
http://europa.eu.int/comm/health/ph_overview/strategy/reflection_process_en.htm

The paper seeks comment on developing and implementing an EU health strategy.

Notice: We would encourage general practitioners to make a copy of ID-Link available in the surgery waiting area.

If your contact details have changed, please let the Department of Public Health know **(061-483337)** and this will ensure timely delivery of your copy.

This report is produced with the assistance of the Area Medical Officers, Senior Area Medical Officers and the Mid-Western Regional Hospital Laboratory.

Some data are provisional and are subject to amendment.

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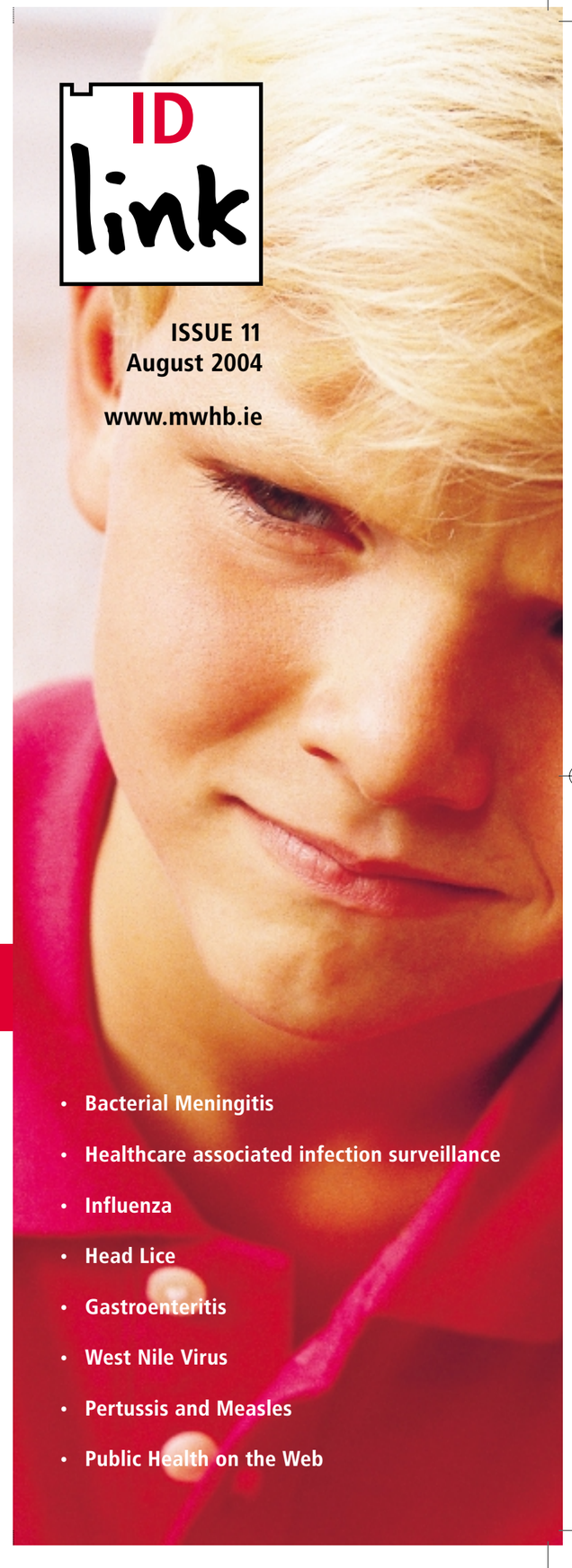
All rates calculated using 2002 Census data.



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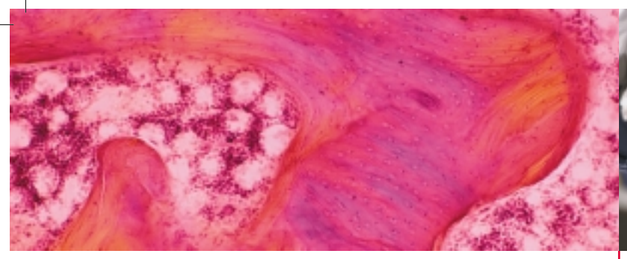


Bacterial Meningitis

From January to July 2004 there have been seven reported cases of bacterial meningitis in the mid-west. Four cases were reported in Limerick, two in Clare and one in Tipperary North. Six were meningococcal disease, five cases were confirmed as Group B and one was typed as Group Y. The Y group is not common in Ireland and in fact this case in an adolescent male who had very recently arrived from another EU country.

Especially from October until April, parents and clinicians should be vigilant for signs and symptoms of bacterial meningitis and meningococcal disease.

A recent article by Purcell and others in the British Medical Journal highlighted that, based on evidence from retrospective studies, the risk of meningococcal disease in household contacts of a patient can be reduced by 89% if they take antibiotics known to eradicate meningococcal carriage.[1]

[1.] Purcell B, S Samuelsson, SJM Hahné and others.
BMJ 2004; 328: 1339.

Healthcare associated infection surveillance

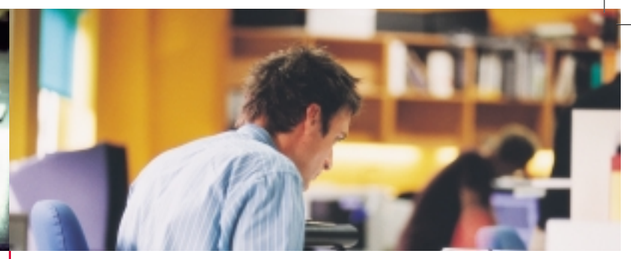
In the United Kingdom, health agencies have published reports for the third year of mandatory surveillance of *S. aureus* bacteraemia in hospitals. In 2004, this is being expanded to include surveillance schemes for orthopaedic surgical site infection and *Clostridium difficile* associated disease. In Ireland, it is hoped that comprehensive systematic surveillance of HAI will begin once national guidelines are issued from committees established under the Strategy for Control of Antimicrobial Resistance in Ireland (SARI).

A report in the UK, by the National Audit Office (March 2004), on progress towards controlling HAI and "superbugs" in hospitals illustrates the difficulties facing effective control and containment of this serious public health challenge.

Influenza

For the first time, the influenza surveillance system in Ireland will continue, albeit scaled down, over the summer months by the NDSC/NVRL/ICGP collaborating group. Last year outbreaks of influenza were detected before the "usual influenza season". One major outbreak occurred in a school in the eastern region and another was noted in the South East. In May and June 2004, two outbreaks of influenza were reported in two primary schools in England. Both types were confirmed as Influenza A (H^1N^1).

In the MWHB, two national schools currently participate in influenza surveillance, reporting absenteeism rates each week. It is hoped that this will continue for the 2004/5 season. Influenza, suspected or confirmed, is notifiable by general practitioners and hospital physicians. The threat of an influenza pandemic has not abated and concern continues in relation to highly pathogenic avian influenza (HPAI) in Asia (www.who.int). Planning for serious events involving respiratory disease is well underway nationally and regionally but the importance of front-line surveillance of influenza-like illness must be stressed.



Head Lice

Head lice are small, six-legged wingless insects, that live in the hair and feed by biting the scalp and sucking blood. Infestation is most common among children as they spread by head to head contact or through sharing brushes, combs and hats. As schools reopen in September the number of children affected increases. Head lice do not reflect standards of hygiene in either the home or school.

Head scratching is often the first sign of head lice. They may be detected at routine hair washing by using a wide toothed comb to straighten and untangle the hair and then switching to a fine tooth comb to check the whole head for lice. Treatment should be undertaken when live head lice are found. Treat all family members found to have live lice at the same time. There are two treatment options (neither will protect against re-infection).

- **Medicated lotions and shampoos -** available from pharmacies without prescription. Shampoos require re-application.
- **Physical Removal -** Methodically combing through the hair and physically removing any lice found. Four sessions over two weeks are required to clear lice. If re-infection occurs, twice weekly sessions must continue.

If there is a persistent problem in a school, as infection passes, forward and back, between children, it is often helpful to adopt a whole-school approach, where all parents check and treat their children on the same week-end. School principals may write to all parents advising them do so. All family members should be checked at the same time and treated if necessary.

Gastroenteritis

The incidence of laboratory confirmed cryptosporidial illness has dropped dramatically in the MWHB since April. Nine cases of salmonellosis have been confirmed up to July 2004 (three in Clare, five in Limerick and one in Tipperary). One family outbreak occurred in January involving three people and another in July involving three people though the latter were not MWHB residents. Cases of laboratory confirmed campylobacter enteritis continue to be reported in all counties. Cases of verotoxin positive *E. coli* involving 0157 and 026 have been detected in recent weeks.

Incidents involving norovirus have been sporadic but not as common as previous years. This may reflect better control measures and heightened awareness of the virus.

- The Department of Public Health stresses the need for handwashing when preparing food and especially poultry that can be heavily colonised with campylobacter
- Care should be taken when changing infants and children who are more commonly affected by gastroenteric pathogens
- Good hygiene is particularly important in caring for someone who is ill
- Proper and thorough cooking of meat and poultry can help avoid many cases of Gasroenteritis. Storage of food at appropriate temperatures is vital - food on display during summer can spoil and allow bacteria grow.

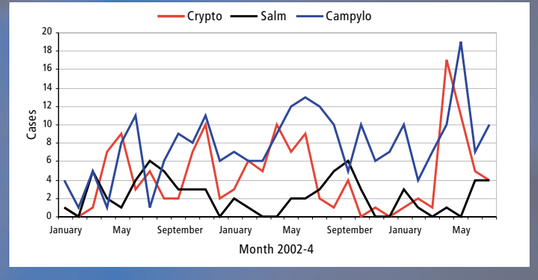


Figure 1: Isolates of campylobacter, cryptosporidium and salmonella detected in MWHB January 2002- July 2004.

West Nile Virus

Two holidaymakers, resident in the Eastern Region and recently returned from Portugal have been confirmed as cases of West Nile Virus (WNV) infection. In Europe, during 2003, there was one imported human WNV case in the Netherlands and two in France (acquired either locally or in Spain). Last year, there was widespread WNV activity over most of the continental United States; a total of 9862 human cases were reported, with 264 deaths, peaking between mid July and early October. Up to late July this year there have been 265 cases in the US with five deaths.

People are usually infected by the bite of an infected mosquito. However, as some people in the US appear to have become infected after receiving blood transfusions and organ transplants, the Irish Blood Transfusion Service will not allow donors returning from affected areas to donate until a month following their return.
While 80% of infections are asymptomatic, approximately 1 in 150 infections will result in severe neurological disease, which is more likely with advancing age. WNV should be considered in adults over 50 years who develop unexplained encephalitis or meningitis, in summer or early autumn, within 14 days of returning from areas where there is known WNV activity (in particular US or Canada).

In order to identify WNV and other commoner causes of viral CNS disease, the NVRL does virological analysis on CSF and blood. Suspected cases should be notified to the Director of Public Health. Travellers are advised to take measures to prevent mosquito bites especially from dusk to dawn when mosquitoes are most active. People should avoid areas near water where mosquitoes are more likely to be present. Loose fitting, light coloured clothing with long sleeves, long trousers, socks and closed shoes should be worn. Use insect repellents on exposed skin. When indoors, screens, nets and air conditioning can reduce the risk of mosquito bites, along with spraying the room with insecticide. Returned travellers who become ill and in need of medical attention should inform their doctor that they have been abroad.

Further information is available from the Department of Public Health, the NDSC website at www.ndsc.ie and the CDC website at www.cdc.gov/ncidod/dvbid/westnile/ <http://www.cdc.gov/ncidod/dvbid/westnile/>