

## Tuberculosis:

There were 32 confirmed cases of tuberculosis in the MWHB in the year 2002, compared to 26 in 2001 and 47 in 2000. This equates to a rate of 9.4/100,000 population (very similar to the national TB rate in 2001). Most cases involved males (72%) and the majority of cases were detected in county Limerick.

Of the 32 cases of TB detected, 31% were found in foreign-born individuals. This is a significant factor in the epidemiology of TB in this region in 2002. The average age of the TB cases in 2002 was younger (44.8 years) compared to 2001 (56.8 years). There is a striking fall in the number of TB cases reported in

those aged over 55 years. Almost 60% of cases had a pulmonary component to the diagnosis (77% in 2001). There was one case of TB meningitis in an adult in 2002. Ten isolates of *Mycobacterium tuberculosis* were cultured at the Mid-Western Regional Microbiology Laboratory and one *M. bovis* was cultured. No antimicrobial resistance was present in any isolate of *M. tuberculosis*. Five cases were lost to follow up, but 75% were recorded as having completed treatment. Three cases died, one reportedly due to TB and another case reporting TB as a contributing factor. A full report will shortly be available from the MWHB website.

## Influenza:

Influenza activity is reported to be falling nationally and regionally from relatively high levels in November. Previously, peaks of this magnitude have been seen in Ireland but usually later in the influenza season. Figure 1 shows the weekly levels reported nationally. The national influenza surveillance system utilising sentinel general practitioners and the NVRL report the presence of influenza type A. Strains of this type were detected in the MWHB for several weeks since September. Data from the MWRH indicate that Influenza type B is also circulating. The Department of Public Health recommends that all frontline health care staff and especially the elderly and those in "at risk" groups avail of the influenza vaccine.

This season 1186 MWHB staff availed of the flu vaccine through the Staff Influenza Vaccination Programme, an increase of 115 on the 2002-2003 season. This represents 18% of the 6,578 MWHB staff.

At this time of year there are a variety of seasonal respiratory pathogens circulating. Several reports of respiratory syncytial virus (RSV) have been received. Mycoplasma and chlamydia pneumoniae and adenovirus respiratory infections were also detected.

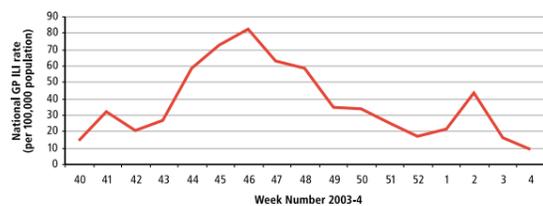


Figure 1: Incidence of reported influenza-like illness in Ireland September to January 2004, (source NDSC).

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Concern has arisen internationally about the spread of avian influenza in East Asia in recent months. The influenza A virus (H5N1) is responsible for the deaths of thousands of bird life and the culling of millions of poultry in affected countries. Ten countries in the region are affected (up to February 9th 2004) and nineteen people have died as a result of the disease in Thailand and Viet Nam. Infection is believed to have been due to contact with infected birds. While no evidence of person-to-person transmission is proven, the possibility has not so far been ruled out. This has particularly important implications for the possibility of an influenza pandemic emerging from these events. According to the World Health Organization, most – but not all – of the major outbreaks recently reported in Asia have been caused by the highly pathogenic H5N1 strain. There is mounting evidence that this strain has a unique capacity to jump the species barrier and cause severe disease, with high mortality, in humans.

A second and greater concern is the possibility that the present situation could give rise to another influenza pandemic in humans. Scientists know that avian and human influenza viruses can exchange genes when a person is simultaneously infected with viruses from both species. This can give rise to a completely new influenza virus to which few, if any, humans would have natural immunity. Existing vaccines, which are developed each year to match presently circulating strains and protect humans during seasonal epidemics, would not be effective against a completely new influenza virus. Currently available vaccines will not protect against disease caused by the H5N1 strain in humans.

If the new virus contains sufficient human genes, transmission directly from one person to another (instead of from birds to humans only) can occur. When this happens, the conditions for the start of a new influenza pandemic will have been met. Most alarming would be a situation in which person-to-person transmission resulted in successive generations of severe disease with high mortality.

This was the situation during the great influenza pandemic of 1918–1919, when a completely new influenza virus subtype emerged and spread around the globe, in around 4 to 6 months. Several waves of infection occurred over 2 years, killing an estimated 40–50 million persons.

## Mumps:

Mumps (infectious parotitis) is a viral illness that may present with fever, headache and inflammation of the salivary glands. Illness is usually mild but a small proportion of cases can have serious complications like deafness, meningitis or encephalitis and males may experience painful inflammation and swelling of the testicles, which may (rarely) result in sterility.

In recent months there has been an upsurge in the number of cases of mumps in England and Wales. Data from the Health Protection Agency in the UK reveals that in 2003 there were almost 4000 notifications of mumps. A proportion of these cases (about 25%) were laboratory confirmed. The attack rate is particularly high in those aged 13 years to 21 years who have not received Mumps, Measles, Rubella (MMR) vaccine. Transmission was high in secondary schools and large outbreaks occurred in two universities in the North East of England.

The incidence of mumps in Ireland rose in 1996 with over 400 notifications of the disease. A small proportion of these cases (4%) occurred in the MWHB. Since 1997 only 0-5 cases are reported in the MWHB each year. This compares to 1989 when over 300 cases were notified in the MWHB region alone. The MMR vaccine was introduced in late 1988. Mumps virus circulating in the general population represents a threat to children who are not protected by

vaccination with MMR. Parents are urged to ensure that children eligible for MMR vaccination are protected at the earliest opportunity (currently recommended at 12 to 15 months of age).

Vaccination uptake of the primary childhood immunisation programme shows little further improvement in uptake of diphtheria, tetanus pertussis, polio and *H. influenzae* b. Uptake for DTP/Polio/Hib is best in Tipperary North, followed by Limerick and then Clare. Meningitis C vaccination uptake has declined slightly in this region as well. Uptake of MMR (82%) stills lags well below the target uptake of 95%.

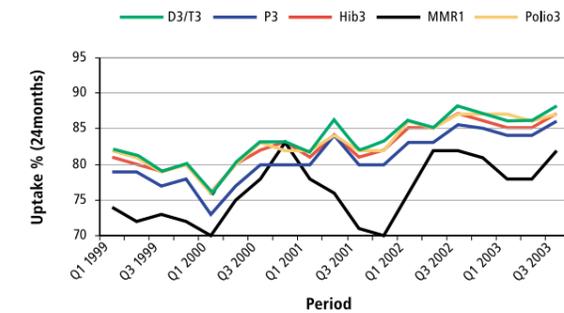


Figure 2: Vaccination uptake of DTP/Polio/Hib and MMR in MWHB at 24 months by quarter, 1999 – 2003.

## Gastroenteritis:

One isolate of a verotoxin positive *E. coli* O26 was reported in a 10 month old female child. While *E. coli* O157 is the most well-known verocytotoxin producer, it must be borne in mind that some other serotypes of *E. coli* can also produce verotoxin, notably O26 and O111. This can on rare occasions lead to the haemolytic uraemic syndrome mainly associated with O157 types. The child had mild gastroenteric symptoms and recovered without complications.

In an unusual development, there were five cases of *Giardia lamblia* reported in autumn. Three were in young women in the Tipperary North region and one was detected in a female infant in Clare, another involved a male infant in Tipperary.

Isolates of salmonella species and cryptosporidium fell in recent months, as expected. No repeat of the unusual autumn peak in cryptosporidium in 2002 was evident this year. The crude annual incidence rate for cryptosporidium was similar in all three regions of the MWHB (13/100,000 population). *Campylobacter* infections remain consistent at between 5 and 10 cases per month. The crude annual rate of *campylobacter* (27.4) and salmonella (7.4) did not vary greatly by region but Clare had the lowest rates and Tipperary had the highest rates. The most common serotype of salmonella was *S. Enteritidis* (8) followed by *S. Typhimurium* (5). Compared to 2002, the incidence of *campylobacter* increased 30%,

salmonella fell 15% and cryptosporidium was largely unchanged. Figure 2 shows the number of cases by month from January 2002 to December 2003 in the MWHB.

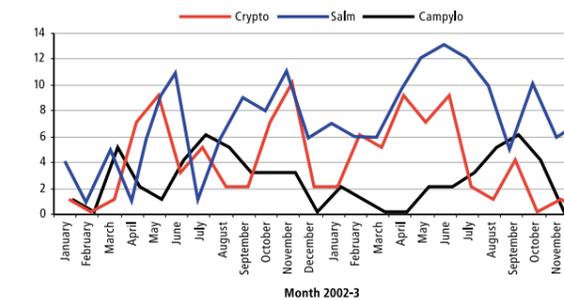


Figure 3: Cases of cryptosporidium, campylobacter and salmonella by month in MWHB, 2002 - 2003.

In 2003, there were two reports of *Salmonella* Typhi in males who had travelled from South East Asia. There were three reports of *Shigella flexneri* in 2003, unrelated to each other. Two reports of *Shigella sonnei* were received in December 2003 and are probably related to travel to Tunisia. The population rates for gastroenteric infections in 2001 and 2002 have now been corrected to data based on Census 2002.

## Infectious Disease Legislation:

The Infectious Diseases (Amendment) (No.3) Regulations 2003 came into effect on January 1st 2004. This updates the schedule of notifiable infectious diseases. Specific diseases and their causes such as campylobacter, cryptosporidium, *Clostridium botulinum* (botulism) are now defined according to case definitions. All clinicians and, for the first time, laboratories are legally obliged to notify these conditions as soon as possible by written or electronic means. New standard notification forms are expected but in the interim, clinicians should continue to use the current booklets to notify the relevant Senior Area Medical Officer. As always some infectious diseases of critical public health importance should be communicated urgently by telephone by the clinician/laboratory. Copies of the case definitions or statutory instrument (SI 707 of 2003) can be forwarded on request. Please contact the Department of Public Health.

**The new list is enclosed with this issue of ID-Link.**

Meanwhile, a new case of laboratory-confirmed infection with the SARS coronavirus (SARS-CoV) was reported in China. This is the fourth case (3 confirmed and one probable) detected in China since 16 December 2003.

## Norovirus:

No one can satisfactorily define why norovirus (SRSV, Norwalk-like virus, 'winter vomiting bug') has emerged as such a public health hazard. Greater awareness and testing and possibly incidence have all been suggested as factors. It remains a fact that large numbers of people can fall ill when this pathogen takes hold in an institutional setting such as a hospital or hotel. It is clear from reports that the pathogen is in the community and circulating in the MWHB. Guidelines from the UK are available for the tourism industry – tour operators and hoteliers. The NDSC has issued national guidelines for the management of outbreaks of norovirus infection in healthcare settings. These guidelines are available in PDF format from the NDSC website (<http://www.ndsc.ie>).



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[www.mwhb.ie](http://www.mwhb.ie)

# Infectious Notification - important changes to Irish law!

## Meningococcal Disease:

Data published in the annual report (2002) of the NDSC show that three health Boards (SHB, WHB and NWHB) reported no cases of Group C invasive meningococcal disease in 2002. Rates in other health boards are very low (0.3 – 0.9/100,000). One case was recorded in the MWHB in 2002 and none were reported in 2003. This has been attributed to the success of the MenC vaccine introduced in October 2000. Group C meningococcal disease has fallen 90% since then. This is also reflected in the number of deaths due to meningococcal disease which have fallen dramatically since 2000.

Invasive meningococcal disease (IMD) due to Group B has declined nationally but in the MWHB it has increased from 19 in 2001 and 2002 to 23 in 2003. In 2002, the MWHB has one of the highest rates of invasive meningococcal disease (8.0) but this was not statistically significant. Two deaths due to IMD were recorded in 2003 in the MWHB.

Examining the data by epidemiological year (July – June), the period 2002 – 2003 showed the largest number of Group B IMD with 24 cases detected, however, there can be many contributing factors to this apparent trend.

Table 1: Cases of invasive meningococcal disease detected July – June in MWHB.

Year	All IMD	IMD Group B	IMD Group C
1998 - 1999	33	10	12
1999 - 2000	38	21	7
2000 - 2001	23	16	5
2001 - 2002	20	16	1
2002 - 2003	29	24	1

*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.



**BORD SLÁINTE**  
AN MHEÁN-IARTHAIR

**Compiled by**  
**Dr Kevin Kelleher, Dr Rose Fitzgerald**  
**and Mr Dominic Whyte**  
**Department of Public Health, MWHB**  
**31-33 Catherine St., Limerick**