

Mumps

Summary

Number of cases, 2014: 742

Number of cases, 2013: 223

Crude incidence rate, 2014: 16.2/100,000

There was a large increase in mumps in 2014 with 742 (16.2/100,000) mumps cases notified. This is 3.3 fold higher than 2013 when 223 cases were notified and 4.6 fold higher than 2012 when 163 cases were notified (figure 1). Large mumps outbreaks previously occurred during the years 2004/2005 and 2008/2009 (figure 1). Nearly two-thirds (n=489) of the cases in 2014 were notified between September and December (figure 2). Of the cases notified between September and December 40% were in the HSE S, 22% in the HSE SE and 17% in the HSE E (figure 2).

In 2014, the largest number of cases was notified in the HSE S and the highest crude incidence rate was in the HSE S followed by the HSE SE (table 1).

Of the 742 mumps cases notified 40% (n=299) were classified as confirmed, 30% (n=222) as probable and 30% (n=221) were classified as possible.

The mean age of cases was 22 years and the median age of cases was 19 years with cases ranging in age from eight months to 81 years (age was unknown for three cases). The largest number of cases and the highest age specific incidence rates were in those 15-19 years and 20-24 years (figures 3 and 4). Fifty five per cent (n=406) of cases were male and 45% (n=336) were female.

Mumps vaccine in Ireland is available as part of the combined measles mumps rubella (MMR) vaccine. In Ireland, vaccination with the first dose of MMR is routinely recommended at twelve months of age and the second dose at four to five years of age. A MMR catch up campaign started during the academic year 2012/2013 and continued during the academic year 2013/2014. During the MMR catch up campaign the HSE offered a dose of MMR vaccine to children/students attending primary schools, second level schools and special schools and home-schooled students who had not completed (or were not sure they had) their two dose MMR vaccination schedule.

Of the 742 mumps cases, 13% (n=97) were unvaccinated, 16% (n=118) had one dose of MMR, 38% (n=281) were reported to have received two doses of MMR, one per cent (n=9) were reported to have three doses of MMR while for 32% (n=237) of cases the number of doses of MMR were not reported. The vaccination date was reported for 52% (n=61/118) of cases reported to have received one dose of MMR. Both vaccination dates were reported for 42% (n=118/281) of cases vaccinated with two doses of MMR. Thirty-four per cent (n=96/281) of the cases reported to have received two doses of MMR were classified as confirmed; 46% (n=44/96) of these cases had both MMR vaccination dates reported. All three vaccination dates were available for 89% (n=8/9) of the cases

given three doses of MMR. Of the nine cases reported to have received three MMR doses four were classified as confirmed cases; three of these four cases had all vaccination dates reported.

The country of birth was recorded as Ireland (n=162), United Kingdom (n=8), France (n=7), Brazil (n=4), Philippines (n=3), Poland (n=3), Australia (n=1), Belgium (n=1), Hungary (n=1), Lithuania (n=1), Malaysia (n=1), Russian Federation (n=1), Togo (n=1), Uganda (n=1) and were unknown or not specified for the remainder.

Thirty six cases were hospitalised, representing five per cent (n=36/742) of all cases and seven per cent (n=36/541) of cases where hospitalisation data was known. The number of days hospitalised was reported for 23 of the hospitalised cases; the median number of days hospitalised was two days (range one to 17 days).

Reported complications of mumps included orchitis (12%, n=33/265), mastitis (1%, n=6/463), pancreatitis (0.4%, n=2/455), meningitis (0.4%, n=2/467), deafness (0.2%, n=1/465), abdominal pain and neck stiffness (n=1), elevated amylase (n=1), arthritis and hepatitis (n=1), back pain (n=1), chest infection (n=1), earache (n=2), neck stiffness (n=1), respiratory tract infection (n=1), stomach ache (n=1), testicular pain (n=1), query tonsillitis (n=1) and possibly viral myocarditis related to mumps (n=1). For some cases a number of clinical complications were reported.

The setting where the case most likely acquired mumps was reported for 53% (n=396/742) of cases. The identified settings were: university/college (32%, n=236), secondary school (7%, n=55), social setting (6%, n=47), family/household (4%, n=31), work (2%, n=13), primary school (1%, n=10), day-care/pre-school (0.4%, n=3) and international travel (0.1%, n=1).

The countries of infection were recorded as Ireland (n=328), United Kingdom (n=4), Bulgaria (n=1), Czech Republic (n=1), Pakistan (n=1), United Republic of Tanzania (n=1), United States (n=1) and was unknown/not specified for 405 cases.

Twenty-three localised outbreaks of mumps were notified during 2014 with a total of 426 associated cases of illness. The outbreak locations included 11 university/college outbreaks (with 322 ill), seven private houses (with 17 ill), two community outbreaks (with 72 ill) and three school outbreaks (with 15 ill).

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 15th October 2015. These figures may differ slightly from those published previously due to ongoing updating of notification data on CIDR.

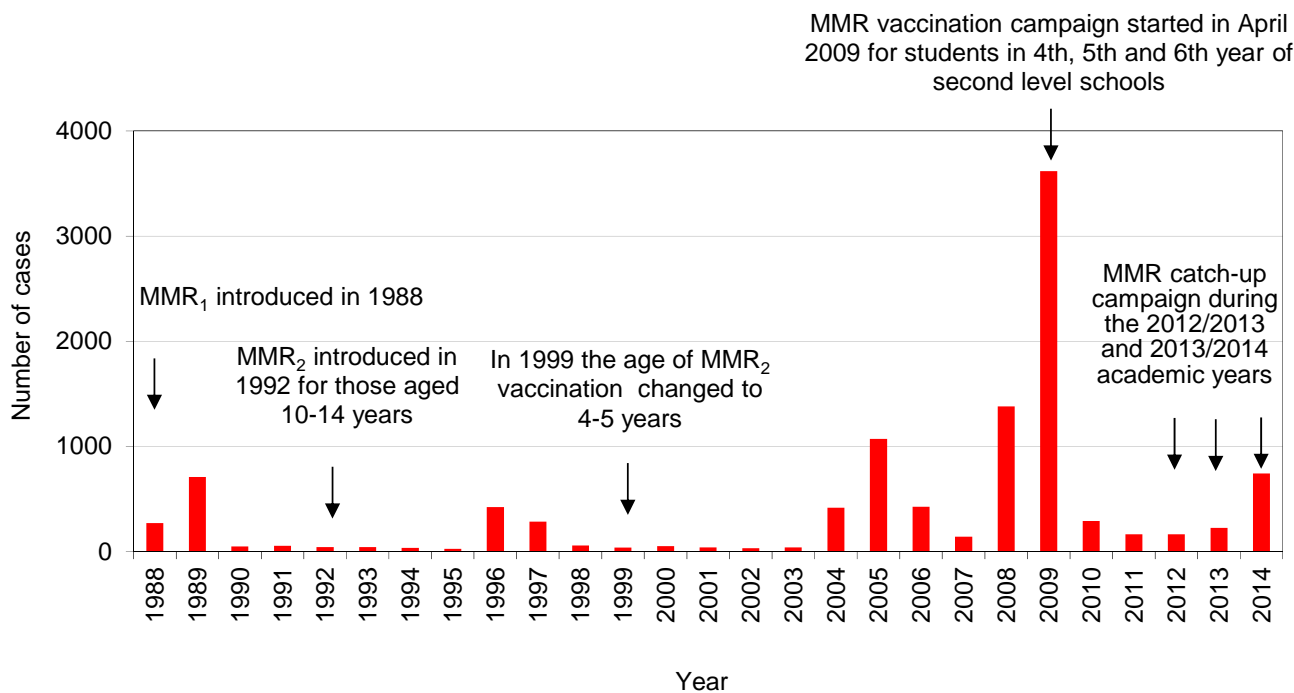


Figure 1. Number of mumps cases by year

A MMR catch-up campaign was conducted during the 2012/2013 and 2013/2014 academic years for children/students attending primary schools, second level schools and special schools and home-schooled students who had not completed (or were not sure they had) their two dose MMR vaccination schedule

MMR₁- first dose of MMR

MMR₂- second dose of MMR

1988-June 2000 data collated by DoHC

July 2000-2014 data collated by HPSC

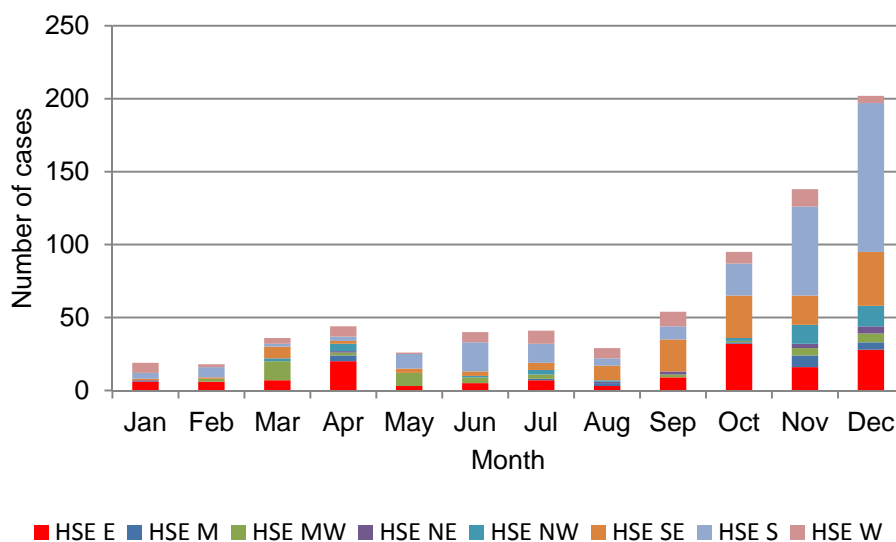


Figure 2. Number of mumps cases in 2014 by month and HSE Area

Table 1. Number of mumps cases and the crude incidence rate per 100,000 population (CIR) by HSE Area in 2014

HSE Area	Number	CIR
HSE E	142	8.8
HSE M	21	7.4
HSE MW	47	12.4
HSE NE	13	2.9
HSE NW	41	15.9
HSE SE	141	28.3
HSE S	258	38.8
HSE W	79	17.7
Total	742	16.2

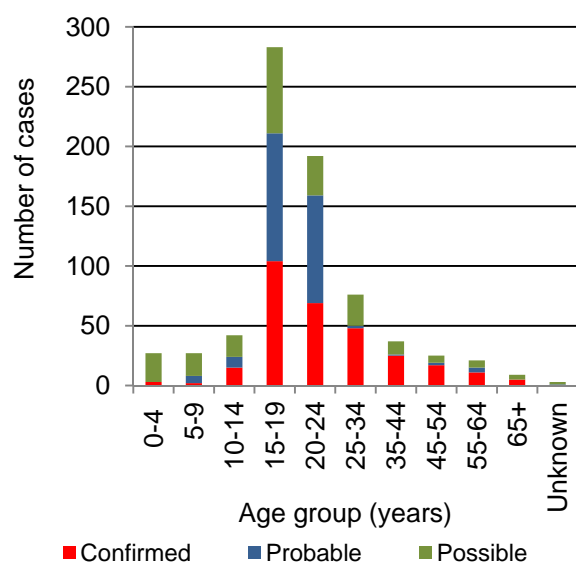


Figure 3. Number of mumps cases in 2014 by age group and case classification

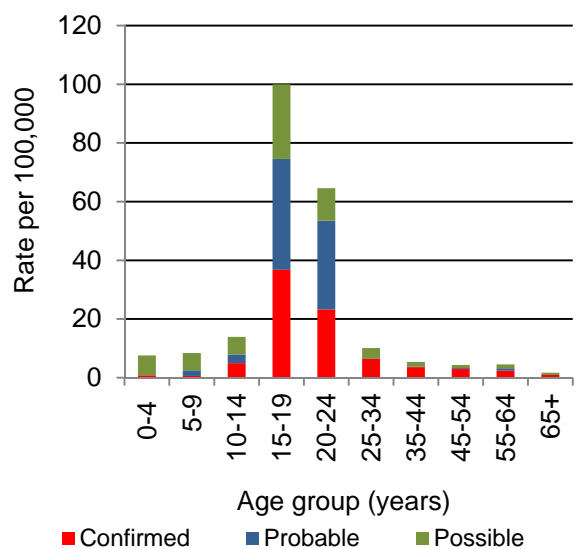


Figure 4. The age specific incidence rates (per 100,000) of mumps cases in 2014 (age unknown for three cases)