

# 1.4 Mumps

## Summary

Number of cases, 2015: 2,014  
 Number of cases, 2014: 742  
 Crude incidence rate, 2015: 43.9/100,000

There was a large increase in mumps in 2015 with 2,014 (43.9/100,000) mumps cases notified. This is 2.7 fold higher than 2014 when 742 cases were notified and nine fold higher than 2013 when 223 cases were notified (figure 1). Large mumps outbreaks previously occurred during the years 2004/2005 and 2008/2009 (figure 1). Two-thirds (n=1,354) of the cases in 2015 were notified between January and June (figure 2).

In 2015, the largest number of cases was notified in the HSE S while the highest crude incidence rate was in the HSE NW (table 1).

Of the 2,014 mumps cases notified 50% (n=998) were classified as confirmed, 19% (n=381) as probable and 32% (n=635) were classified as possible.

The mean age of cases was 23 years and the median age of cases was 20 years with cases ranging in age from two months to 90 years. The highest age specific incidence rates were in those 15-19 years and 20-24 years (figure 3). Fifty eight per cent (n=1,173) of cases were male and 42% (n=838) were female while gender was not reported for three cases.

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

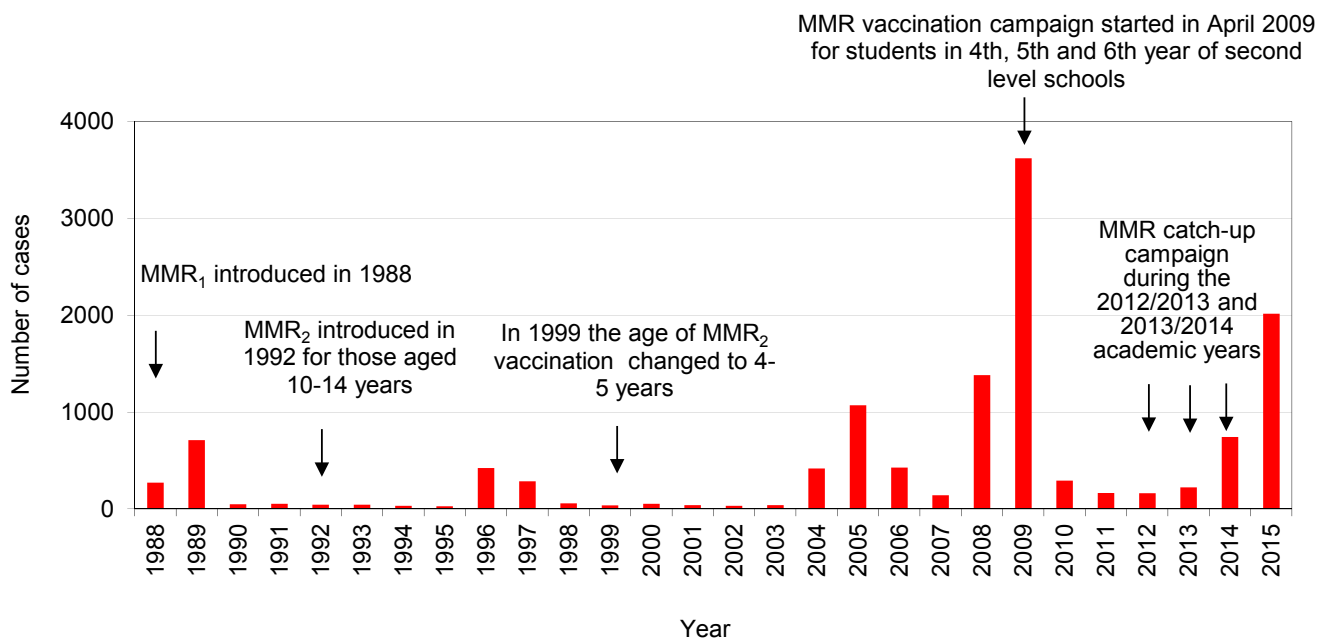


Figure 1. Number of mumps cases by year

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

MMR<sub>1</sub> - first dose of MMR

MMR<sub>2</sub> - second dose of MMR

1988-June 2000 data collated by DoHC

July 2000-2015 data collated by HPSC

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. Additionally, MMR vaccine continued to be recommended for students in college or universities if not previously vaccinated.

Of the 2,014 mumps cases, 10% (n=203) were unvaccinated, 12% (n=239) had one dose of MMR, 33% (n=667) were reported to have received two doses of MMR, one per cent (n=20) were reported to have three doses of MMR while for 44% (n=885) of cases the number of doses of MMR were not reported. The vaccination date was reported for 76% (n=182/239) of cases reported to have received one dose of MMR. Both vaccination dates were reported for 50% (n=336/667) of cases vaccinated with two doses of MMR. Forty per cent (n=268/667) of the cases reported to have received two doses of MMR were classified as confirmed; 41% (n=110/268) of these cases had both MMR vaccination dates reported. All three vaccination dates were available for 45% (n=9/20) of the cases given three doses of MMR. Of the 20 cases reported to have received three MMR doses eight were classified as confirmed cases; one of these eight cases had all three vaccination dates reported.

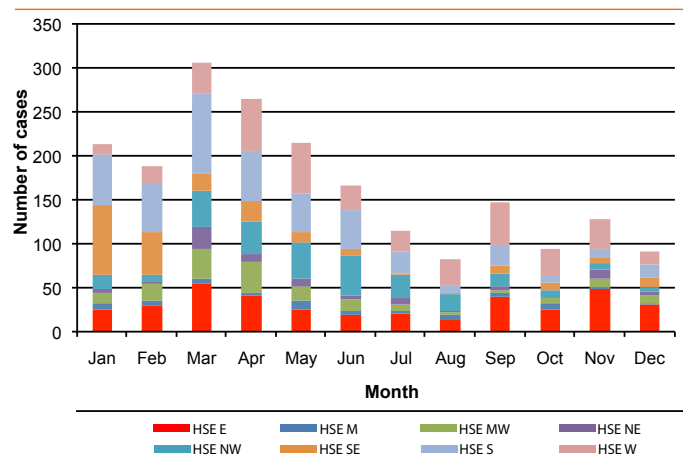


Figure 2. Number of mumps cases in 2015 by month and HSE Area

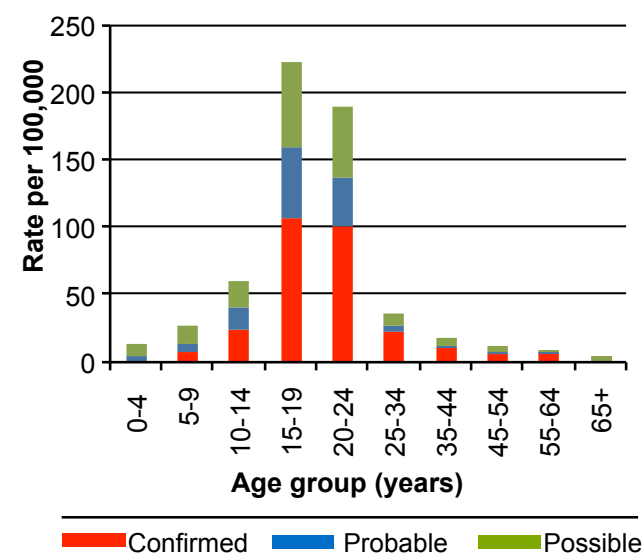


Figure 3. The age specific incidence rates (per 100,000 population) of mumps cases in 2015 by case classification

The country of birth was recorded as Ireland for 480 cases, was recorded as being a country other than Ireland for 94 cases and was unknown or not specified for the remainder.

Seventy two cases were hospitalised, representing four per cent (n=72/2,014) of all cases and six per cent (n=72/1,156) of cases where hospitalisation data was known. The number of days hospitalised was reported for 36 of the hospitalised cases; the median number of days hospitalised was four days (range one to 11 days).

The most commonly reported complications of mumps included orchitis (13%, n=68/520), meningitis (1.6%, n=14/865), pancreatitis (1.2%, n=10/855), deafness (0.8%, n=7/858), mastitis (0.2%, n=2/859), headache (n=4) and abdominal pain (n=3). For some cases a number of clinical complications were reported.

The setting where the case most likely acquired mumps was reported for 40% (n=815/2,014) of cases. The identified settings were: university/college (14%, n=279), social setting (12%, n=249), secondary school (8%, n=154), family/household (3%, n=63), primary school (2%, n=39), work (1%, n=23), other healthcare facility (0.2%, n=4), international travel (0.1%, n=3) and day-care/pre-school (0.05%, n=1).

The probable countries of infection were recorded as Ireland (n=767), Spain (n=2), Brazil (n=1), France (n=1), Italy (n=1), Poland (n=1), United Kingdom (n=1), United States Minor Outlying Islands (n=1) and was unknown or not specified for the remainder.

Thirty nine localised outbreaks of mumps were notified during 2015 with a total of 370 associated cases of illness. The outbreak locations included 15 school outbreaks (with 200 ill), nine private houses (with 32 ill), seven university/college outbreaks (with 90 ill), three community outbreaks (with 30 ill), two childcare facility outbreaks (with five ill), one extended family outbreak (with four ill) and two workplace outbreaks (with nine ill).

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 7<sup>th</sup> September 2016. These figures may differ slightly from those published previously due to ongoing updating of notification data on CIDR.

Table 1. Number of mumps cases and the crude incidence rate per 100,000 population (CIR) by HSE Area in 2015

HSE Area	Number	CIR
HSE E	379	23.4
HSE M	57	20.2
HSE MW	165	43.5
HSE NE	85	19.3
HSE NW	267	103.4
HSE SE	230	46.2
HSE S	438	65.9
HSE W	393	88.2
<b>Total</b>	<b>2014</b>	<b>43.9</b>