



# Annual Epidemiological Report

November 2018

## Mumps in Ireland, 2017

### Key Facts

- There was a decrease in mumps in 2017 with 291 (6.1/100,000) mumps cases notified.
- In comparison 491 mumps cases were notified in 2016 and 2,013 cases were notified in 2015.
- The highest age specific incidence rates in 2016 were in those aged 15-19 years.
- The median age of cases was 22 years (range nine months to 88 years).
- Four percent (n=13/291) of cases were hospitalised.

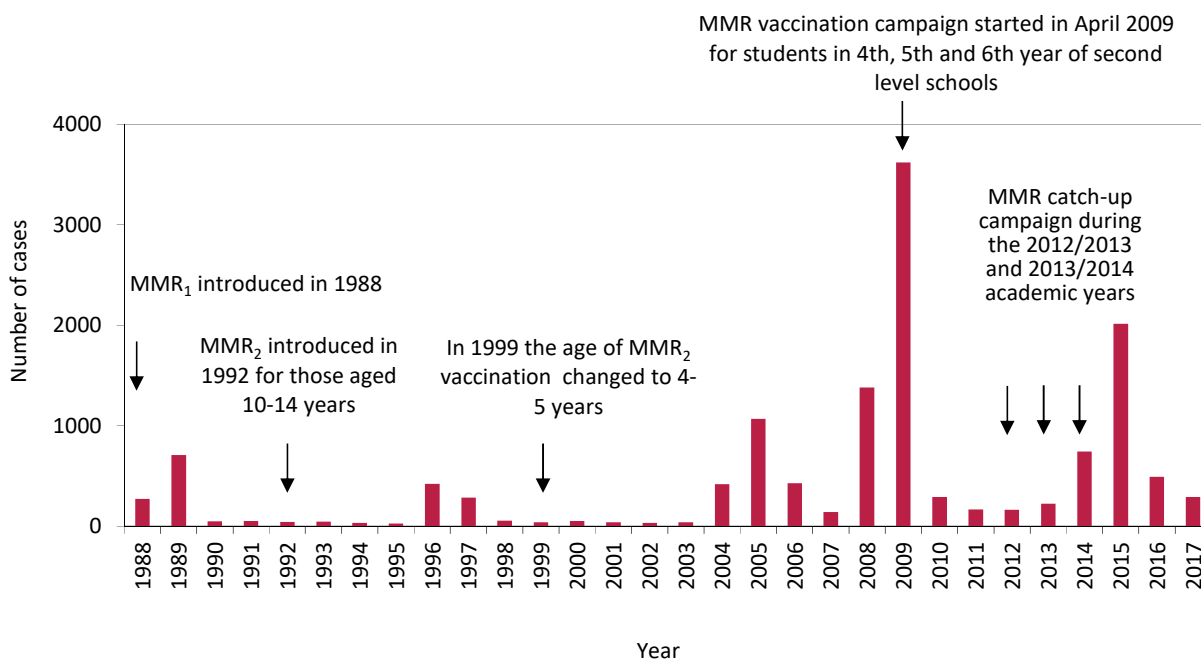
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## Epidemiology

There was a decrease in mumps in 2017 with 291 (6.1/100,000) mumps cases notified compared to 2016 when 491 (10.3/100,000) mumps cases were notified and 2015 when 2,013 (42.3/100,000) cases were notified (figure 1). Mumps notifications by month from 2015 to 2017 are shown in figure 2.

**Figure 1. Number of mumps cases by year in Ireland**



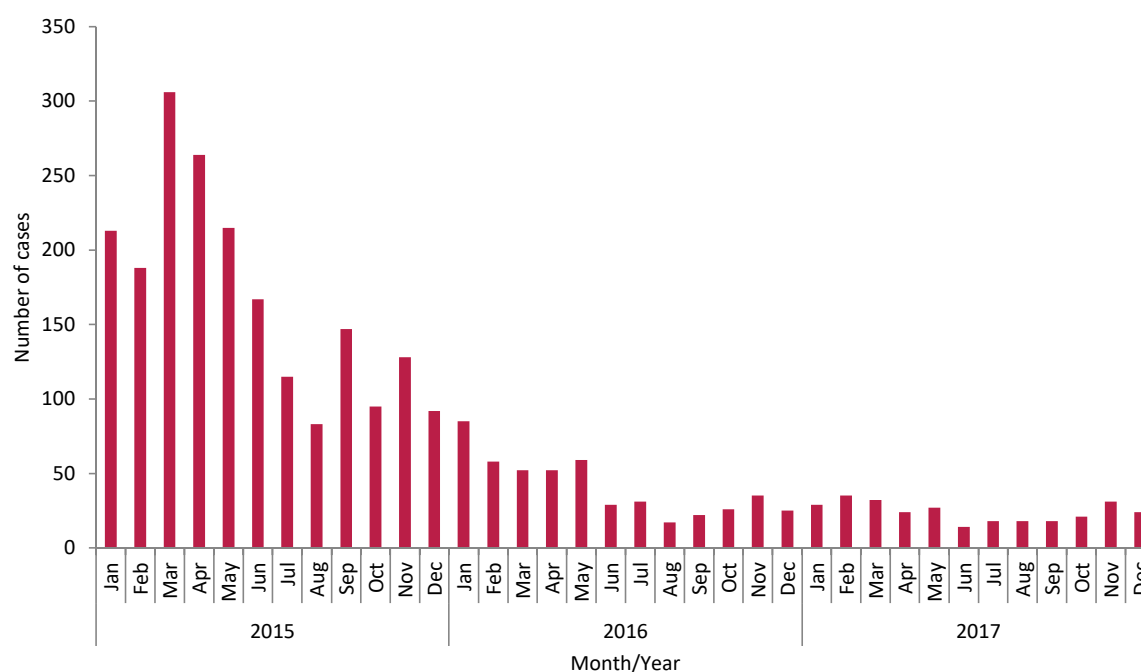
A MMR catch-up campaign was conducted during the 2012/2013 and 2013/2014 academic years for children/students attending primary schools, second level schools and special schools and home-schooled students who had not completed (or were not sure they had) their two dose MMR vaccination schedule

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

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

1988-June 2000 data collated by DoHC

July 2000-2017 data collated by HPSC

**Figure 2. Number of mumps cases from 2015 to 2017 by month in Ireland**

In 2017, the largest number of cases was notified in the HSE E (table 1).

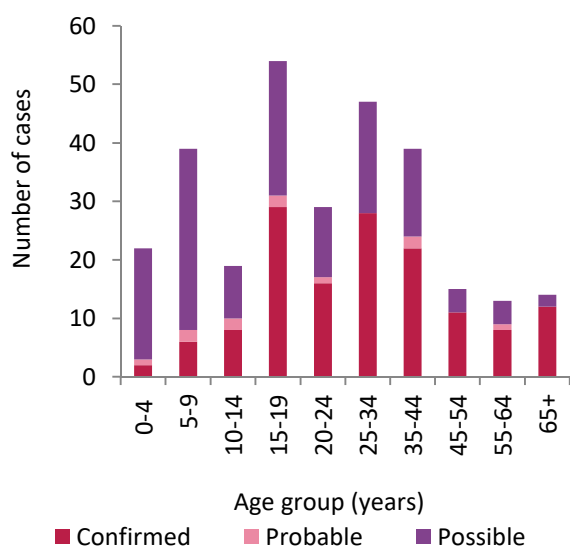
**Table 1. Number of mumps cases and the crude incidence rate per 100,000 population (CIR) by HSE Area in 2017**

HSE Area	Number	CIR
HSE E	117	6.8
HSE M	17	5.8
HSE MW	14	3.6
HSE NE	16	3.5
HSE NW	13	5.1
HSE SE	36	7.0
HSE S	46	6.7
HSE W	32	7.1
<b>Total</b>	<b>291</b>	<b>6.1</b>

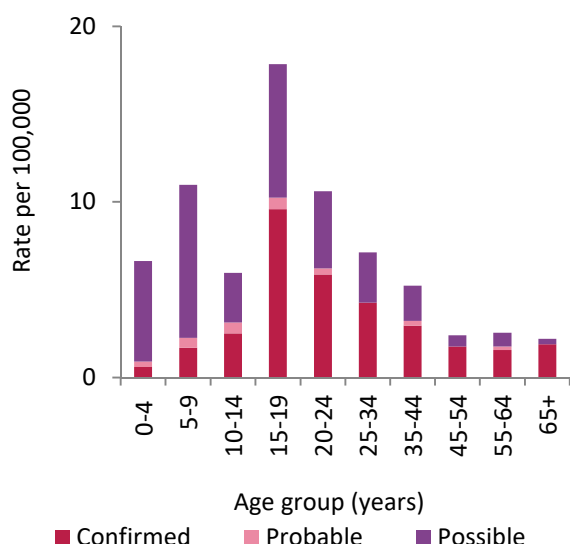
Of the 291 mumps cases notified 49% (n=142) were classified as confirmed, four percent (n=11) as probable and 47% (n=138) were classified as possible.

The median age of cases was 22 years (mean age was 26 years) with cases ranging in age from nine months to 88 years. The largest number of cases and the highest age specific incidence rates were in those aged 15-19 years (figure 3 and figure 4). Forty six percent (n=134) of cases were female and 53% (n=155) were male while gender was not reported for one percent (n=2).

**Figure 3. Number of mumps cases in 2017 by age group and case classification in Ireland**



**Figure 4. The age specific incidence rate (per 100,000) of mumps cases in 2017 by age group and case classification in Ireland**



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 vaccination campaign started in April 2009 for students in fourth, fifth and sixth year of second level schools. A MMR catch up campaign started during the academic year 2012/2013 and continued during the academic year 2013/2014 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. Additionally, MMR vaccine continued to be recommended for students in college or universities if not previously vaccinated.

Of the 291 mumps cases, 8% (n=23) were unvaccinated, 12% (n=35) had one dose of

MMR, 20% (n=58) were reported to have received two doses of MMR while for 60% (n=175) of cases the number of doses of MMR were not reported. The vaccination date was reported for 69% (n=24/35) of cases reported to have received one dose of MMR. Both vaccination dates were reported for 47% (n=27/58) of cases vaccinated with two doses of MMR. Twenty six percent (n=15/58) of the cases reported to have received two doses of MMR were classified as confirmed; 47% (n=7/15) of these cases had both MMR vaccination dates reported.

The country of birth was recorded as Ireland for 24% (n=70) of cases, was recorded as being a country other than Ireland for 9% (n=25) of cases and was unknown or not specified for the remainder.

Thirteen cases were hospitalised, representing four percent (n=13/291) of all cases and nine percent (n=13/151) of cases where hospitalisation data was known. The number of days hospitalised was reported for eight of the hospitalised cases; the median number of days hospitalised was four days (range two to 27 days).

The reported complications of mumps included orchitis (12%, n=7/59), deafness (2%, n=2/107), bacterial septicaemia (n=1) and otalgia (n=1).

The setting where the case most likely acquired mumps was reported for 11% (n=31/291) of cases. The identified settings were: social setting (3%, n=9), secondary school (3%, n=8), family/household (1%, n=4), primary school (1%, n=3), international travel (1%, n=2), university/college (1%, n=2), work (1%, n=2) and day-care/pre-school (0.3%, n=1).

The probable countries of infection were recorded as Ireland (n=85), United Kingdom (n=3), Brazil (n=1), Philippines (n=1) Spain (n=1), United Arab Emirates (n=1) and was unknown or not specified for the remainder.

Three localised outbreaks of mumps were notified during 2017 with a total of 26 associated cases of illness. The outbreak locations included two schools (with 24 ill) and a private house (with 2 ill).

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 12<sup>th</sup> November 2018. These figures may differ slightly from those published previously due to ongoing updating of notification data on CIDR. The 2016 census data was used here to calculate rates.

## Acknowledgements

HPSC would like to thank all those who provided data for this report – Departments of Public Health, laboratories and clinicians.

### Report prepared by:

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