### 1.4 Mumps

## Summary

Number of cases, 2016: 488
Number of cases, 2015: 2,014
Crude incidence rate, 2016: 10.2/100,000

There was a decrease in mumps in 2016 with 488 (10.2/100,000) mumps cases notified compared to 2015 when 2,014 cases were notified (figure 1). Sixty three percent ( $n=305$ ) of the cases in 2016 were notified between January and May (figure 2).

In 2016, the largest number of cases was notified in the HSE E while the highest crude incidence rate was in the HSE S (table 1).

Of the 488 mumps cases notified $52 \%(n=252)$ were classified as confirmed, eight percent ( $n=41$ ) as probable and $40 \%$ ( $n=195$ ) were classified as possible.

The median age of cases was 22 years (mean age was 27 years) with cases ranging in age from one to 87 years (age was unknown for one case). The highest age specific incidence rates were in those aged 15-19 years and 20-24 years (figure 3). Fifty one per cent ( $n=247$ ) of cases were female and $48 \%(n=235)$ were male while gender was not reported for one percent ( $n=6$ ).

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


Year
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 $M M R_{1}$ - first dose of MMR
$M M R_{2}$ - second dose of MMR
1988-June 2000 data collated by DoHC
July 2000-2016 data collated by HPSC
vaccination schedule. Additionally, MMR vaccine continued to be recommended for students in college or universities if not previously vaccinated.

Of the 488 mumps cases, $11 \%$ ( $n=53$ ) were unvaccinated, $11 \%(n=54)$ had one dose of MMR, $23 \%(n=111)$ were reported to have received two doses of MMR while for 55\% ( $n=270$ ) of cases the number of doses of MMR were not reported. The vaccination date was reported for $74 \%$ ( $n=40 / 54$ ) of cases reported to have received one dose of MMR. Both vaccination dates were reported for $55 \%$ ( $n=61 / 111$ ) of cases vaccinated with two doses of MMR. Forty per cent ( $n=44 / 111$ ) of the cases reported to have received two doses of MMR were classified as confirmed; $45 \%(n=20 / 44)$ of these cases had both MMR vaccination dates reported.

The country of birth was recorded as Ireland for $15 \%(n=71)$ of cases, was recorded as being a country other than Ireland for $7 \%(n=32)$ of cases and was unknown or not specified for the remainder.

Twenty three cases were hospitalised, representing five per cent ( $n=23 / 488$ ) of all cases and nine per cent ( $n=23 / 266$ ) of cases where hospitalisation data was known. The number of days hospitalised was reported for five of the hospitalised


Figure 2. Number of mumps cases in 2016 by month


Figure 3. The age specific incidence rates (per 100,000 population) of mumps cases in 2016 by case classification
cases; the median number of days hospitalised was two days (range two to five days).

The most commonly reported complications of mumps included orchitis ( $8 \%, n=8 / 99$ ), pancreatitis ( $0.5 \%, n=1 / 185$ ) and deafness ( $0.5 \%, \mathrm{n}=1 / 185$ ).

The setting where the case most likely acquired mumps was reported for $23 \%$ ( $n=111 / 488$ ) of cases. The identified settings were: university/college (7\%, n=36), social setting (6\%, $\mathrm{n}=28$ ), secondary school ( $5 \%$, $\mathrm{n}=24$ ), family/household (3\%, $n=14)$, work ( $1 \%, n=5$ ), international travel ( $0.4 \%, n=2$ ), day-care/pre-school ( $0.2 \%, n=1$ ) and primary school ( $0.2 \%, n=1$ ).

The probable countries of infection were recorded as Ireland ( $n=142$ ), Spain ( $n=1$ ), United Kingdom ( $n=1$ ), Vietnam ( $n=1$ ) and was unknown or not specified for the remainder.

Ten localised outbreaks of mumps were notified during 2016 with a total of 58 associated cases of illness. The outbreak locations included one university/college outbreak (with 31 ill), seven private houses (with 18 ill), one school outbreak (with 7 ill), and one outbreak reported as an outbreak among close social contacts (with two ill).

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on $4^{\text {th }}$ September 2017. 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.

Table 1. Number of mumps cases and the crude incidence rate per 100,000 population (CIR) by HSE Area in 2016

| HSE Area | Number | CIR |
| :--- | :---: | :---: |
| HSE E | 140 | 8.2 |
| HSE M | 42 | 14.4 |
| HSE MW | 31 | 8.1 |
| HSE NE | 21 | 4.6 |
| HSE NW | 19 | 7.4 |
| HSE SE | 66 | 12.9 |
| HSE S | 111 | 16.1 |
| HSE W | 58 | 12.8 |
| Total | $\mathbf{4 8 8}$ | $\mathbf{1 0 . 2}$ |

