### 1.4 Mumps

## Summary

Number of cases, 2010: 293
Number of cases, 2009: 3,620
Crude incidence rate, 2010: 6.9/100,000

In total, there were 293 (6.9/100,000) mumps cases notified in 2010. This is a large decline compared to the years 2008/2009 and 2004/2005 when large outbreaks occurred (figure 1). The number of cases notified in 2010, however, is still considerably higher compared to the years 1998 to 2003 when there was an average of 43 cases notified each year.

In 2010, of the 293 mumps cases notified 37\% ( $n=109$ ) were classified as confirmed, four percent ( $n=11$ ) were classified as probable and $59 \%(n=173)$ were classified as possible.

The largest number of cases was notified in the HSE-E followed by the HSE-W, while the highest crude incidence rates were in the HSE-W, HSE-E and HSE-MW (table 1).

Table 1. Number of mumps cases notified and the crude incidence rate per 100,000 population (CIR) by HSE Area in 2010

| HSE Area | Number | CIR |
| :--- | :--- | :--- |
| HSE-E | 141 | 9.4 |
| HSE-M | 12 | 4.8 |
| HSE-MW | 34 | 9.4 |
| HSE-NE | 14 | 3.6 |
| HSE-NW | 10 | 4.2 |
| HSE-SE | 25 | 5.4 |
| HSE-S | 17 | 2.7 |
| HSE-W | 40 | 9.7 |
| Total | 293 | $\mathbf{6 . 9}$ |

In 2010, cases ranged in age from one year to 87 years; with a mean age of 24 years and a median age of 20 years (age was unknown for three cases). The number of cases by age group and the age specific incidence rates are shown in figures 2 and 3 . The highest age specific incidence rates were in those 15-19 years followed by those 20-24 years. Of the 293 mumps cases, $54 \%(n=158)$ were male and $45 \%(n=133)$ were female (gender was unreported for two cases).


Figure 1. Number of mumps notifications by year and year of introduction of the measles-mumps-rubella (MMR) vaccine in Ireland
$M M R_{1}$ - first dose of $M M R$
$M M R_{2}$ - second dose of $M M R$
1988-June 2000 data collated by DoHC
July 2000-2010 data collated by HPSC

Of the 293 mumps cases, $17 \%(n=50)$ were unvaccinated, $16 \%(n=47)$ had one dose of the measles-mumps-rubella vaccine (MMR), $19 \%$ ( $n=56$ ) were reported to have received two doses of MMR while for $48 \%(n=140)$ of cases the number of doses of MMR was not reported. The vaccination date was reported for $53 \%$ ( $n=25 / 47$ ) of cases reported to have received one dose of MMR. Both vaccination dates were reported for $23 \%$ ( $n=13 / 56$ ) of cases vaccinated with two doses of MMR. One of the cases where both vaccination dates were reported was vaccinated 25 days prior to onset and potentially was exposed just prior to or shortly after vaccination; another mumps case that only had the second MMR date reported was vaccinated three days prior to onset. Nine percent $(n=5 / 56)$ of the cases reported to have received two doses of MMR were classified as confirmed; only one of these had MMR vaccination dates reported.

Eight cases were hospitalised, representing three percent ( $n=8 / 293$ ) of all cases and five percent ( $n=8 / 146$ ) of cases where hospitalisation data were provided. The number of days hospitalised was reported for five of the hospitalised cases and ranged from one to 10 days with a median of two days.

Reported complications of mumps included orchitis ( $14 \%, n=10 / 72$ ), deafness ( $1.6 \%, n=2 / 125$ ), mastitis (1.6\%, $n=2 / 124$ ), pancreatitis ( $1.6 \%, n=2 / 122$ ), encephalitis ( $0.8 \%, n=1 / 126$ ) and appendicitis ( $n=1$ ).

The setting where the case most likely acquired mumps was reported for $24 \%(n=69 / 293)$ of cases. Social setting was reported as the setting where the case most likely acquired mumps for $51 \%$ ( $n=35 / 69$ ) of cases where this information was provided, school/university/college was reported for 23\% ( $n=16 / 69$ ) and family/household was reported for $14 \%(n=10 / 69)$ of these cases.

Five localised outbreaks of mumps were notified during 2010 with 17 associated cases of illness. The outbreak locations included two private houses (with 7 ill), two schools (with 7 ill) and one university/college (with 3 ill).

Confirmed Probable Possible

Figure 2. Number of notified mumps cases in 2010 by age group and case classification

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on $13^{\text {th }}$ October 2010. These figures may differ slightly from those published previously due to ongoing updating of notification data on CIDR.

Confirmed Probable $\square$ Possible

Figure 3. The age specific incidence rates (per 100,000) of notified mumps cases in 2010 (age is unknown for three cases)

