



# Annual Epidemiological Report

October 2018

## Tetanus in Ireland, 2017

### Key Facts

- One case of non-fatal tetanus was notified in 2017.
- Seventeen cases of tetanus were reported since tetanus became notifiable in November 1981.

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## Background

Tetanus is a rare disease in Ireland since the introduction of tetanus vaccines in the 1930s. However, cases still occur.

## Epidemiology

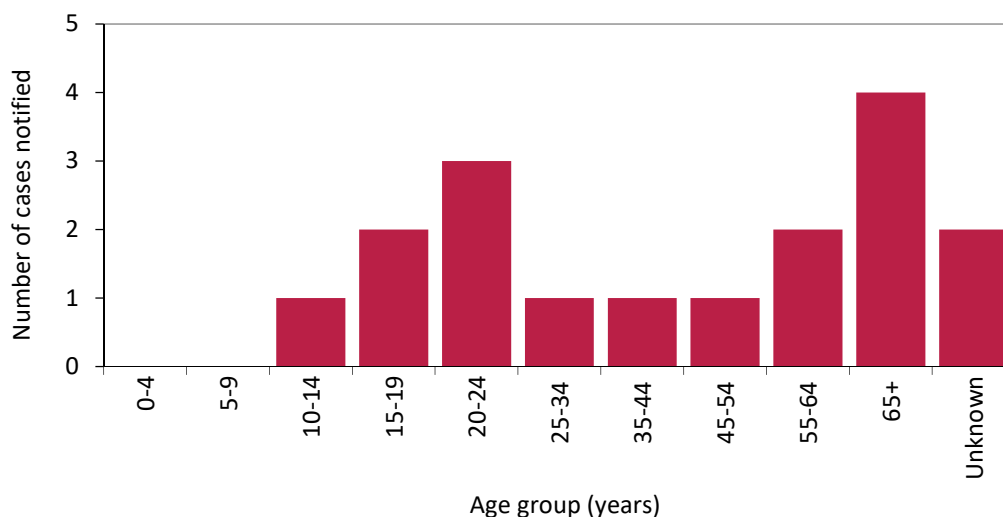
### Summary of 2017 data

One case of non-fatal tetanus was notified in 2017. The case was in the age group 20-24 years and was classified as probable. It was not known if the case had ever received any tetanus vaccinations. The case was bitten by a dog. The severity of illness was classified as Grade 1/mild illness.

### Summary of case data since 1981

Seventeen cases of tetanus were reported since tetanus became notifiable in November 1981. The number of tetanus cases notified by age group is shown in figure 1.

**Figure 1.** Tetanus cases notified (n=17) from November 1981 to 2017 by age group, in Ireland



Two deaths were reported, both cases were aged >60 years. Of the 17 tetanus cases, nine (53%) were male, six (35%) were female while gender was unreported for two (12%).

The following wound injuries (n=12) were reported among the 17 notified cases:

wound injuries from a road traffic accident (n=1), wound from a fall outdoors (n=1), wound associated with a dog bite (n=2), wound from a kitchen knife (n=1), gardening associated leg wound (n=1), leg scratches in an avid gardener (n=1), hand wound associated with a clean piece of wood (n=1), a farming associated hand wound (n=1), a foot wound from a thorn (n=1), hand injuries from a can and a rusty nail (n=1) and a case developed paralysis with muscle spasms two days after injecting heroin (n=1). An additional case was reported having a discharging wound on a toe one week prior to onset of tetanus symptoms developing, however, the cause of the wound was not reported.

Vaccination data were reported for six of the cases. Two cases, in the age groups 10-14 years and 20-24 years, were unvaccinated. One case, in the age group 15-19 years, was reported to have received three doses of tetanus vaccine as a child and a booster at four years and again at five-six years of age. One case was reported to have received a single tetanus vaccine around 40 years prior to infection. One case was reported as having received one dose of a tetanus vaccine 20 years earlier but it was not known if the case had received any previous doses (i.e. primary tetanus vaccines as an infant). One case (age group 15-19 years) was reported as having received one dose of a tetanus vaccine as an infant and a dose when they were two years of age.

Vaccine efficacy after a complete series of vaccines (five doses) is almost 100%. However, immunity wanes and after 10 years may be insufficient to provide protection. The childhood immunisation schedule in Ireland recommends children receive a dose of tetanus toxoid containing vaccine at two, four and six months of age and booster doses at four-five years of age and 11-14 years of age. For vaccinated persons who have received five doses of tetanus toxoid, booster doses may be considered every 10 years. This is based on concern regarding the decline of antibody levels with age and potential failure of single booster doses to produce protective levels in older individuals. For more complete and detailed information on recommended tetanus immunisations please see the HSE National Immunisation Office website at <http://www.immunisation.ie>.

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 22<sup>nd</sup> October 2018. These figures may differ from those published previously due to ongoing updating of notification data on CIDR.

## Acknowledgements

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