



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

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MEASLES OUTBREAK WEST CORK

There is an ongoing measles outbreak in West Cork. The initial focus was the Schull and Skibbreen areas but cases are now occurring in the wider area of West Cork, with cases notified from Bantry, Bandon, Dunmanway and Clonakilty.

Measles clinical course

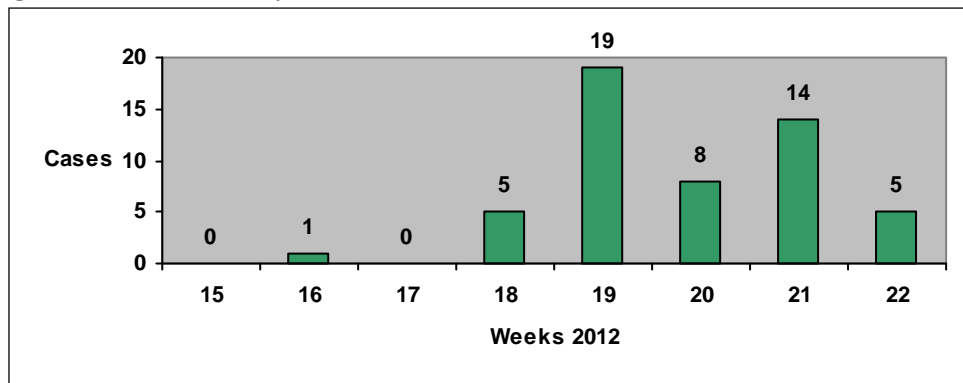
Measles is an acute, highly infectious viral illness transmitted via droplet infection. Almost all who are infected develop symptoms. The first symptoms of measles occur after a 10-12 day incubation period following exposure. The prodrome is heralded by the onset of fever, malaise, conjunctivitis, coryza, and tracheobronchitis and lasts 2-4 days. This clinical picture is characterized by fever, which increases in a stepwise fashion, often reaching 40°C. Koplik's spots, found on the buccal mucosa are believed to be pathognomonic for measles. These salt-grain-like spots appears on the buccal mucosa 1-2 days before onset of rash and may be noted for an additional 1-2 days after rash onset. The rash presents as erythematous maculopapular eruptions that usually appear 14 days after exposure and spread from the head (face, forehead, hairline, ears and upper neck) over the trunk to the extremities during a 3-4 day period. The rash is usually most confluent on the face and upper body and initially blanches on pressure. During the next 3-4 days it fades in the order of its appearance, and assumes a non-blanching brownish appearance.

Individuals with measles are considered infectious from 4 days before until 4 days after rash onset.

Epidemiology in West Cork

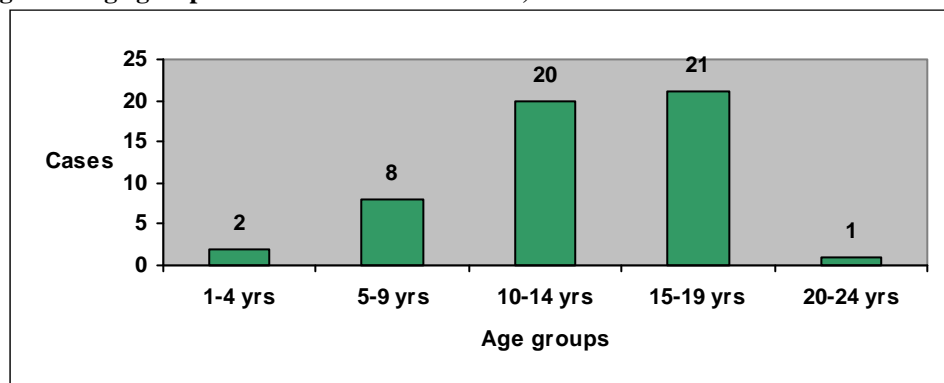
The first case in this outbreak occurred in mid April 2012, with subsequent spread to household and school contacts, see Figure 1.

Figure 1. Measles cases by week, West Cork, 2012



Teenagers are the predominate age group affected, with 37 of the 52 cases occurring in the 13 to 19 year age group. This reflects initial transmission in a secondary school. Two cases have been hospitalised.

Figure 2. Age group of measles cases West Cork, 2012



MMR Status

90% of cases are unvaccinated, see Table 1. The uptake of MMR at age two years is 92% nationally, 93% in Cork and Kerry as a whole but only 86% in West Cork. Historically there is a low uptake of vaccination in the West Cork area, with a high percentage of parents declining vaccines for their children. The ensuing cohort of unvaccinated children has allowed for the rapid spread of the disease once introduced to the population.

Table 1. Vaccination Status

Vaccination Status	Number	Percentage
Unvaccinated	47	90%
MMR 1 dose confirmed	1	2%
MMR 1 dose unconfirmed*	3	6%
MMR 2 doses confirmed	1	2%
Total	52	100%

*Reported to have had MMR in another country but no confirmatory documentation

Control Actions

MMR is a highly effective vaccine. After one dose of MMR about 95% of children will be protected against measles and after 2 doses up to 99%. All children are recommended to have two MMR vaccines, the first at 12 months and the second at 4-5 years. Please continue to encourage parents to vaccinate their children.

To date, the outbreak has mainly affected teenagers. However, there is now evidence of transmission in the general community, which increases the risk to infants who are more likely to develop severe illness and complications. As an additional outbreak control measure, infants aged 6-12 months who are resident in the West Cork area are now recommended to have an early dose of MMR vaccine. This is an interim recommendation for the duration of the outbreak. MMR is generally not recommended under 12 months, as it is less effective. Studies indicate that MMR vaccine is approximately 75% effective at 6 months, 80% effective at 9 months and 95% effective at 12 months. Therefore, these children will still need to have a routine dose of MMR at 12 months (leave at least 1 month between the 2 doses of MMR), with a further dose at 4-5 years.

MMR vaccination may provide protection to a susceptible contact if given within 72 hours of exposure.

In certain specific circumstances human normal immunoglobulin, within 6 days of exposure, may be indicated for susceptible contacts (those who are not immune to measles and are at high risk of complications). Those at risk include the immunocompromised, infants aged 5-12 months (those aged under 5 months will usually have maternal antibodies), infants of mothers who develop measles and non immune pregnant women.

Due to its high infectivity, suspect measles cases should be isolated.

The public health recommendation is that any unvaccinated siblings of cases should stay at home for the duration of the incubation period, which may be up to 21 days. This is to ensure that they do not further transmit infection.

Please remember to notify all suspected cases of measles to the Department of Public Health.

INCREASE IN PERTUSSIS

Nationally we have been experiencing high rates of notification since mid-2011. Most notifications are among children under 5 years of age. Those most at risk are children under 6 months of age (prior to completion of vaccination). Many infants have been hospitalised but no deaths have been reported in 2012 (there was one pertussis associated death in 2011).

In Cork and Kerry we have had 26 notifications of pertussis so far in 2012. Of these cases, 12 have been aged less than 6 months, all of whom were hospitalised.

Please encourage parents to ensure their children are appropriately vaccinated with pertussis containing vaccines. Early and appropriate treatment of disease may prevent onward transmission. Individuals with pertussis should avoid contact with unimmunised children while infectious and prior to treatment (if possible).

Further information on pertussis can be found on the HPSC website located at <http://www.hpsc.ie/hpsc/A-Z/VaccinePreventable/PertussisWhoopingCough/>