



Infection report / Immunisation

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Laboratory confirmed cases of measles, mumps and rubella, England: January to March 2016

Measles, mumps and rubella are notifiable diseases and healthcare professionals suspecting a case are legally required to inform the authorities. Oral fluid testing is offered to all notified cases to confirm the diagnosis. This is part of the enhanced surveillance for these vaccine preventable diseases. Recent infection is confirmed by measuring the presence of IgM antibodies or detecting viral RNA (by PCR) in the samples.

Data presented here are for the first quarter of 2016 (ie January and March). Cases include those confirmed by oral fluid testing (IgM antibody tests and/or PCR) at the National Reference Laboratory, Colindale, and national routine laboratory reports (mumps infections only) (table 1). Analyses are by date of onset and regional breakdown figures relate to Government Office Regions.

Quarterly figures from 2013 for cases confirmed by oral fluid antibody detection only and annual total numbers of confirmed cases by region and age are available from:

<https://www.gov.uk/government/publications/measles-confirmed-cases>

<https://www.gov.uk/government/publications/mumps-confirmed-cases>

<https://www.gov.uk/government/publications/rubella-confirmed-cases>

Table 1. Total laboratory confirmed cases of measles, mumps and rubella, and oral fluid IgM antibody tests in notified cases: weeks 1-13/2016

<u>Notified and investigated cases</u>		<u>Confirmed cases</u>						
Infecting virus	Cases reported to Health Protection Teams in England*	Oral fluid testing					<u>Other samples</u>	<u>Total</u>
		Number Tested	% of reported cases tested	<i>Total Positive</i>	<i>Recently Vaccinated</i>	<u>Confirmed infections</u>		
Measles	556	386	69%	47	11	36	31	67
Mumps	1622	1069	66%	69	0	69	53	122
Rubella	137	69	50%	1	0	1	0	1

*This represents the number of infections reported as possible cases and investigated by individual PHE centres in England

Measles

In England, 67 new measles infections were confirmed in the first three months of 2016 compared to 92 in the whole of 2015 [1].

The two regions in the south of England (London and East of England) reported the majority of the cases (82%, 55/67) with all but three of these associated with an outbreak linked to an importation from Italy [2]. The remaining 12 cases were in also in the south of England; seven from the South West and five from the South East. Only one case reported receiving one dose of measles-containing vaccine. Four of the 67 cases were imported infections with a history of recent travel to India, Poland, Indonesia and Equatorial Guinea.

Scotland reported two confirmed measles cases this quarter while Northern Ireland and Wales didn't report any measles cases.

The majority (40/67, 60%) of the measles diagnoses in England were in children and adolescents: eight (12%) aged under one year of age; five (7%) aged 1-4 years; six (9%) aged 5- 9; 10 (15%) aged 10-14 years; nine (13%) aged 15-18 years. The remaining 27 cases (40%) were adults aged 19-50 years.

Mumps

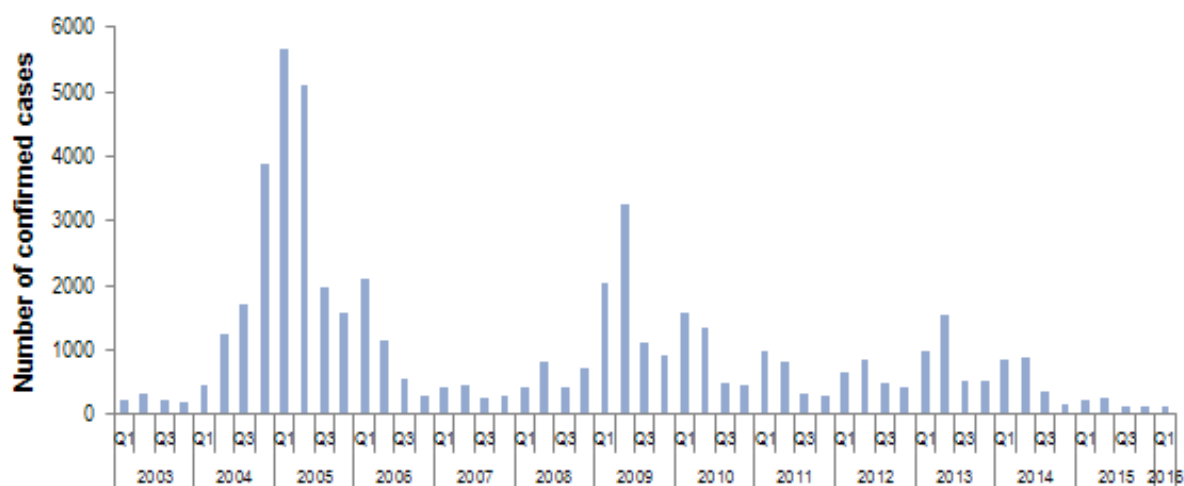
There were only 122 laboratory confirmed mumps infections in England with onset dates in the period between January and March 2016, similar to the number confirmed in the last quarter of 2015 (121), continuing the trend of very low incidence as observed for the last five quarters (figure 2) [1]. An additional 25 cases were confirmed in oral fluid samples from Wales.

Cases are predominantly in young adults between 18 and 35 years of age (66/122 54%). About a third (42/122) of all cases this quarter reported receiving one or two doses of MMR vaccination in childhood. For these cases where the vaccination date was known, the average number of years since last MMR vaccination was 14.6 years. Mumps cases were reported in all regions of England (table 2).

Table 2. Laboratory confirmed cases of mumps by age group and region, England: weeks 1-13/2016

Region	<1	1-4	5-9	10-14	15-19	20-24	25+	Total
North East	–	–	–	4	3	1	3	11
North West	–	2	–	2	4	2	6	16
Yorkshire & Humber	–	–	–	5	5	2	5	17
East Midlands	–	–	1	–	5	–	3	9
West Midlands	–	1	–	–	2	–	6	9
East of England	–	1	–	1	–	1	6	9
London	–	3	–	1	2	6	12	24
South East	–	–	–	–	6	3	6	15
South West	–	1	–	–	3	2	6	12
Total	0	8	1	13	30	17	53	122

Figure 2. Laboratory confirmed cases of mumps by quarter, England, 2003-2016



Rubella

Only one case of rubella infection was confirmed in the period between January and March 2016. The case was a male who acquired rubella infection abroad.

Reference

1. PHE (November 2015). '[Laboratory confirmed cases of measles, mumps and rubella, England: July to September 2015](#)', *HPR* 9(42): immunisation.
2. '[MMR vaccination call following recent measles cases](#)'. PHE website news story, 11 March 2016