



Infection report / Immunisation

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Laboratory confirmed cases of measles, mumps and rubella, England: January to March 2015

Measles, mumps and rubella are notifiable diseases and healthcare professionals suspecting a case are legally required to inform the authorities. Measles and rubella are targeted for elimination in Europe by 2015 and progress towards this target is monitored by the European Centre for Disease Prevention and Control [1]. 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 2015 (ie January to March). Cases include those confirmed by oral fluid testing (IgM antibody tests and/or PCR) at the Virus Reference Department (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 1-13/2015

<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	543	394	73%	26	8	18	2	20
Mumps	2057	1406	68%	152	1	151	76	227
Rubella	136	77	57%	1	0	1	3	4

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

Measles

Twenty measles infections were laboratory confirmed in England with onset dates in January to March 2015 compared to only four cases in the last quarter of 2014 [1].

Measles cases were reported from four regions with London identifying 15 of the 20 new infections. Scotland and Wales reported no cases this quarter.

All of the new infections were associated with travel abroad; two separate importations from India resulting in a family cluster (two cases) and a school cluster (13 cases), three cases from Germany (two separate importations), and one importation each from China and Thailand. Measles virus was isolated from the samples of the 16 of the 20 cases. The predominant genotype identified was D8 (India, Germany and Thailand), although D4 (India) and H1 (China) were also isolated.

The majority (16/20, 80%) of cases this quarter were in children and adolescents: two (10%) aged 1-4 years; two (10%) aged 5-9 year, eight (40%) aged 10-14 years; four (20%) aged 15-18 years. The remaining four cases (20%) were adults aged 25-61 years. Only one case had a history of vaccination and they reported receiving two doses of a measles-containing vaccine.

Mumps

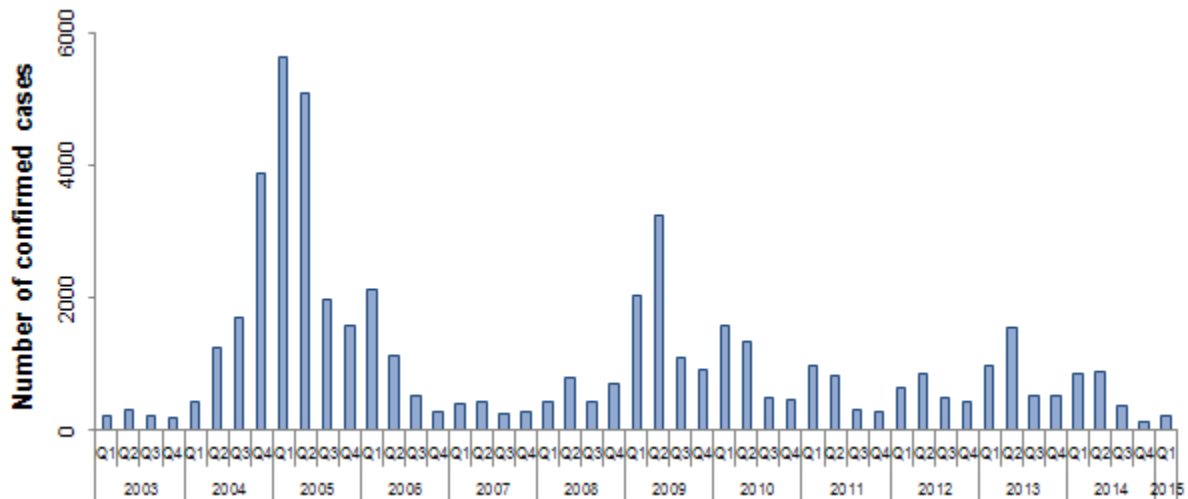
There were 227 laboratory confirmed cases of mumps in England with an onset date in the first quarter of 2015 compared to 140 in the last quarter of 2014, following a trend observed for more than a decade where the first quarter of the year always exceeds the last quarter of the previous year (figure) [2]. Additionally, nine oral fluid samples were confirmed from Wales.

Cases continue to be identified predominantly in young adults between 15 and 30 years of age (194/227 86%, table 2). Over 37% of all cases this quarter have reported receiving at least one dose of MMR vaccination in childhood, suggesting that some waning immunity may be contributing to transmission. Mumps cases were identified in all regions of England although greater numbers were reported in Yorkshire and Humber, and the South East (table 2).

Table 2: Laboratory confirmed cases of mumps by age group and region, England: weeks 1-13/2015

Region	<1	1-4	5-9	10-14	15-19	20-24	25+	Total
North East	–	–	1	1	5	7	10	24
North West	–	3	1	2	1	5	16	28
Yorkshire & Humber	–	1	3	3	14	11	14	46
East Midlands	–	–	–	1	1	–	3	5
West Midlands	–	–	–	–	4	2	7	13
East of England	–	–	–	1	1	4	15	21
London	–	1	4	1	4	4	15	29
South East	–	1	–	–	14	7	21	43
South West	–	–	–	–	4	9	5	18
Total	0	6	9	9	48	49	106	227

Laboratory confirmed cases of mumps by quarter, England, 2003-2015



Rubella

Four cases of rubella were confirmed this quarter, compared to one in the whole of 2014. Two of the cases were in adults, associated with travel to France, one of them being a pregnant woman. The other two cases were congenital rubella infections.

References

1. ECDC (2015). [Measles and rubella monitoring](#) (January).
 2. PHE (2015). "[Laboratory confirmed cases of measles, mumps and rubella, England: October to December 2014](#)", *HPR* 9(7): immunisation (27 February).
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