



Infection report

Volume 9 Number 7 Published on: 27 February 2015

Immunisation

Laboratory confirmed cases of measles, mumps and rubella, England: October to December 2014

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 last quarter of 2014 (i.e. October to December). 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. Laboratory-confirmed cases of measles, mumps and rubella and oral fluid IgM antibody tests in notified cases: weeks 40-53/2014

Notified and investigated cases		Confirmed cases						
Infecting virus	Cases reported to HPTs in England*	Oral fluid testing					Other samples	Total
		Number tested	% of reported cases tested	Total positive	Recently vaccinated	Confirmed infections		
Measles	564	370	65.6	12	8	4	–	4
Mumps	1911	1189	62.2	88	1	87	53	140
Rubella	127	80	1	1	–	–	–	0

Notes:

"–" Indicates that testing yielded no positives.

* This represents the number of infections reported as possible cases and investigated by individual PHE centres in England. HPT = Health Protection Team.

Measles

Only four measles infections were laboratory confirmed in England with onset dates in October to December compared to 11 cases in the previous quarter of the year [1]. This brings the total confirmed infections in England for 2014 to 103, compared to 1,413 in 2013.

Three of the four confirmed infections this quarter were identified in London and although an epidemiological link was not identified all had the same measles virus strain, a genotype B3. The fourth case from Yorkshire and the Humber had a history of recent travel to India (genotype D8). All cases reported this quarter were unvaccinated children aged between 1 and 4 years.

In Scotland one case was identified in the same period but none were reported from Northern Ireland or Wales.

Mumps

There were 140 laboratory confirmed cases of mumps in England with onset in the last quarter of 2014 compared to 364 previous quarter bringing the total number of mumps infections for the whole of 2014 to 2,224, below the total for 2013 (3,524 cases) and the lowest annual total since 2003 (figure) [1]. Additionally, three oral fluid samples were confirmed from Wales this quarter bringing the Welsh total for the 2014 to 380.

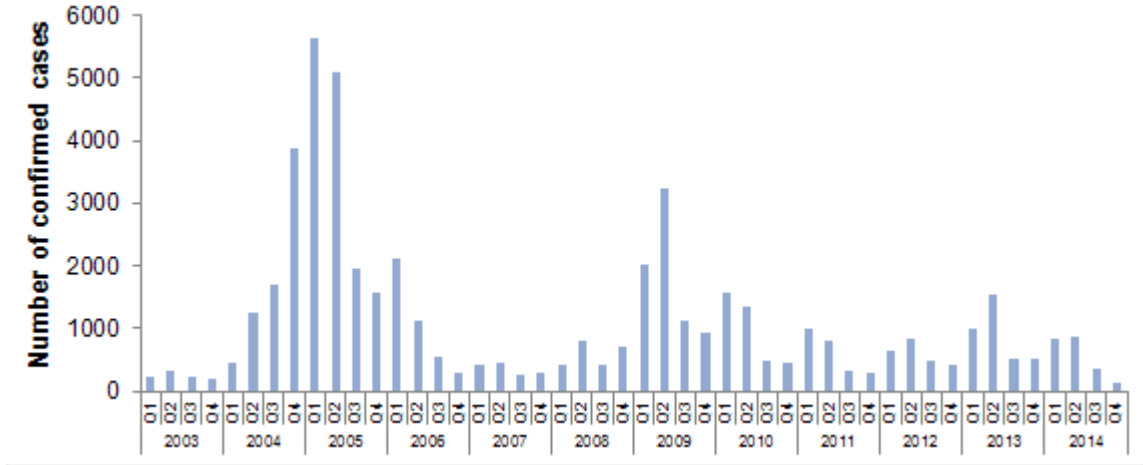
Cases continue to be identified predominantly in young adults between 15 and 30 years of age (84/140 60%, Table 2). Over 26% of all cases this quarter have reported receiving at least one dose of MMR vaccination in childhood, suggesting that some waning immunity may be contributing

to transmission. Mumps cases were identified in all regions of England although greater numbers were reported in London, and the South (table 2).

Table 2. Laboratory confirmed cases of mumps by age group and region, England: weeks 40-53/2014

Region	<1	1-4	5-9	10-14	15-19	20-24	25+	Total
North East	–	–	1	–	2	6	10	19
North West	–	–	1	1	3	4	2	11
Yorkshire & Humber	–	–	4	–	3	1	10	18
East Midlands	–	2	–	1	–	1	4	8
West Midlands	–	–	–	–	3	1	11	15
East of England	–	–	–	–	3	1	11	15
London	–	–	4	1	2	4	12	23
South East	–	–	–	–	3	4	12	19
South West	–	–	–	–	4	7	9	20
Total	–	2	10	3	22	28	75	140

Laboratory confirmed cases of mumps by quarter, England, 2003-2014



Rubella

There were no confirmed rubella infections this quarter and only one confirmed infection this year in a congenitally infected infant.

Reference

1. PHE. Laboratory confirmed cases of measles, mumps and rubella, England: July to September 2014. *Health Protection Report HPR* [serial online] 2014 [cited 28 November 2014]; 8(45): Immunisation. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/382399/hpr4514.pdf