



Infection report / Immunisation

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Laboratory confirmed cases of measles, mumps and rubella, England: October to December 2015

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 fourth quarter of 2015 (ie October to December). 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 40-53/2015

<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	385	275	71.4%	18	6	12	11	23
Mumps	1910	1159	60.7%	68	0	68	119	187
Rubella	145	81	55.9%	5	5	0	0	0

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

Measles

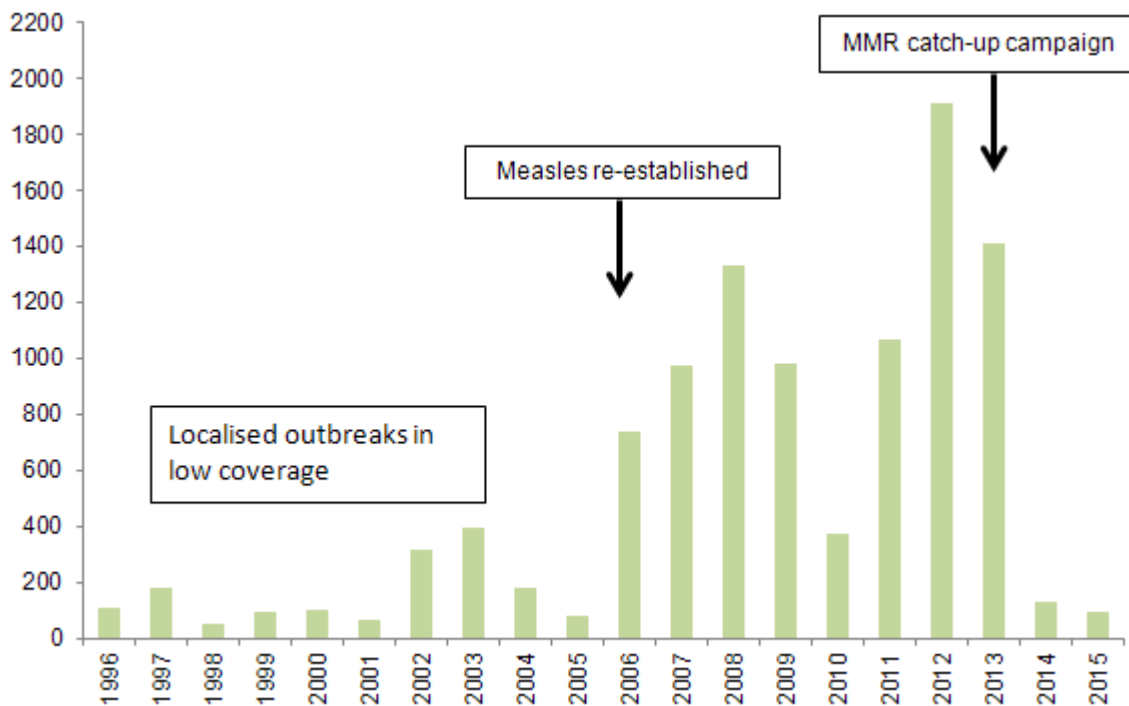
In England, 23 new measles infections were diagnosed in the period between October and December 2015 compared to 15 in the previous quarter of 2015 [1]. This brings the total number of measles cases for 2015 in England to 91, the lowest annual figure in a decade (figure 1).

All but one of the 23 infections were associated with an outbreak in South East London. None of the affected individuals were vaccinated and acquired their infection from family members, in hospital or within the community. There was one imported infection this quarter with a history of recent travel to Africa.

The majority (17/235, 74%) of measles diagnoses were in children and adolescents: two (9%) aged under 1 year of age; five (22%) aged 1-4 years; one (4%) aged 5-9; six (26%) aged 10-14; and three (13%) aged 15-18 years. The remaining six cases (26%) were adults aged 19-53 years.

Scotland, Northern Ireland and Wales reported no measles cases in 2015.

Figure 1. Annual confirmed cases of measles in England – 1996-2015



Mumps

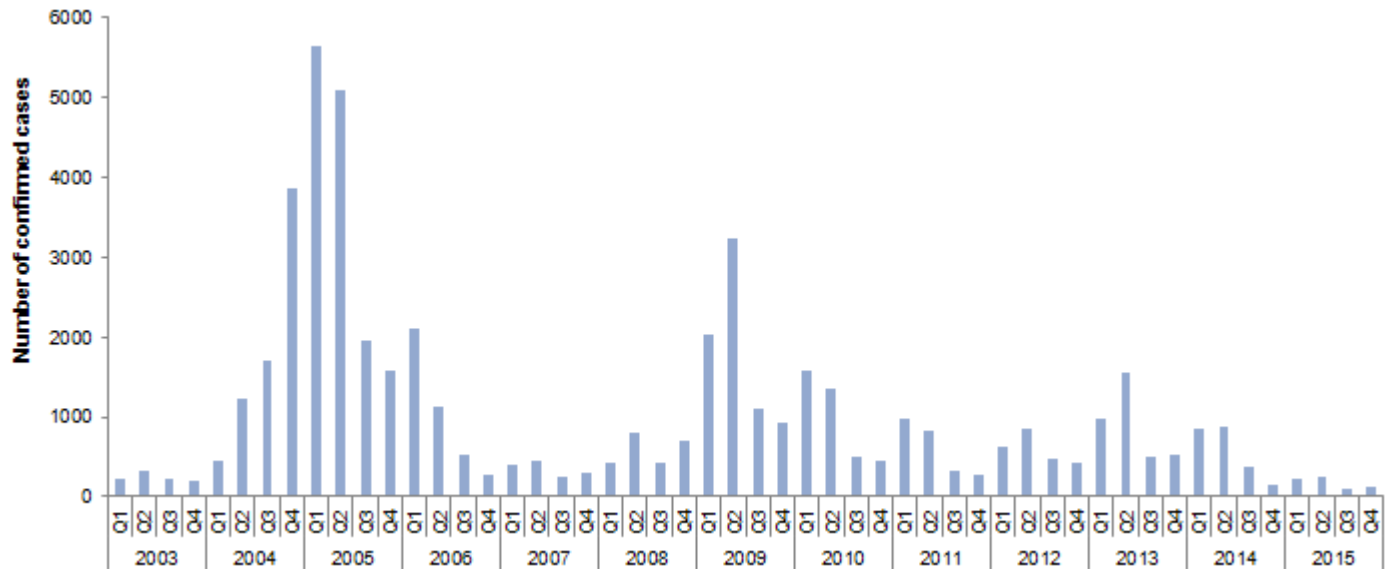
There were 121 laboratory confirmed mumps infections in England with onset dates in the fourth quarter of 2015, bringing the total number of cases in 2015 to 713. The number of cases confirmed in the previous quarter was 112 (figure) [1]. An additional 62 mumps cases were confirmed in oral fluid samples from Wales.

The numbers of infections in 2015 were the lowest reported for 12 years, similar to the total for 2003 (figure 2). Cases continued to be identified predominantly in young adults between 18 and 35 years of age (58/121 48%, Table 2). Over a third (45/121) of all cases this quarter reported receiving two doses of MMR vaccination in childhood. 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 40-53/2015

Region	<1	1-4	5-9	10-14	15-19	20-24	25+	Total
North East	–	–	–	5	14	–	7	26
North West	–	3	–	1	2	4	4	14
Yorkshire & Humber	–	2	1	–	4	3	1	11
East Midlands	–	1	1	–	2	–	1	5
West Midlands	–	–	–	–	1	3	3	7
East of England	–	2	2	1	–	1	3	9
London	–	7	1	–	–	2	8	18
South East	–	2	3	–	2	4	4	15
South West	–	1	1	–	7	1	6	16
Total	0	18	9	7	32	18	37	121

Figure 2. Laboratory confirmed cases of mumps by quarter, England, 2003-2015



Rubella

No new cases of rubella infection were confirmed this quarter. In 2015, there were only three confirmed infections of rubella. In addition, two cases of congenital rubella syndrome (CRS) were also identified in babies born to mothers 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.