

Briefing Note 2017/052

Date 23/11/2017

Event	Measles outbreaks linked to importations from Europe
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PHE NIRP Level	n/a
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Background and Interpretation:

This Briefing Note provides an update on current measles epidemiology in Europe and the UK in light of recently reported outbreaks in England linked to importations from Europe with some spread within under vaccinated communities.

Elimination status and situation in Europe

In September 2017 the World Health Organization (WHO) confirmed that the UK achieved measles elimination in 2016 [1]. This is a huge achievement and a testament to all the hard work by our health professionals in the NHS to ensure that children and adults are fully protected with two doses of the measles, mumps and rubella (MMR) vaccine. Achieving measles elimination in the UK does not mean that measles has been wiped out. Measles remains endemic in many countries around the world and there are currently several large measles outbreaks across Europe. In the 12-month period between 1 September 2016 and 31 August 2017, the highest number of cases were reported by Romania (4,982) (genotype B3), Italy (4,814) (genotypes B3 and D8) and Germany (967) (B3 and D8), accounting for 39%, 38% and 8% respectively of all EU/EEA cases [2]. The WHO Regional Office for Europe has warned that this threatens progress towards elimination and urged national authorities to maximize efforts to achieve or sustain at least 95% coverage with two doses of MMR vaccine to prevent circulation in the event of an importation [3].

England measles epidemiology and recent outbreaks

From the 1 January to the 30 September 2017 there have been a total of 118 laboratory confirmed measles cases in England. Thirty (25%) of these are known to be importations (average age 15 years, Range: 8 months to 56 years), which have led to limited onward transmission (at least 5 cases), mainly among un- or under-immunised extended household contacts. Twenty-two (73%) of the England importations were linked to travel within Europe, with Romania contributing the largest number of cases (n=8). Fifty nine of the measles cases up to the end of September were in adults over 18 years of age with a correspondingly high hospitalisation rate of 51%.

In September an outbreak was declared in the Stroud area linked to a Steiner school with very low MMR uptake rates and this has led to some limited spread within the community (genotype B3, 26 laboratory confirmed and 4 epidemiologically linked cases up to 17th November, average age: 11 years, range: 8 months to 47 years). In addition, since the beginning of November outbreaks have been declared in Leeds (genotype B3, 3 laboratory confirmed and 6 epidemiologically linked cases up to 17th November, average age: 10 years, range: 3 to 16 years) and in Liverpool (genotype B3, 8 laboratory confirmed and 3 epidemiologically linked cases up to 17th November, median age: 2 years, range: 9 months to 12 years), both arising from importations from Romania which have spread within the Romanian and other under vaccinated communities. This brings the provisional total of laboratory confirmed measles cases in England up to 155 by the 17th November. This is still well below the 548 total number of confirmed measles cases in England in 2016.

Earlier this year an outbreak in the south-east region of Wales arising from an importation from Romania led to seventeen confirmed cases (May to August 2017) in part fuelled by links to schools with low MMR coverage [4].

Implications and recommendations for Health Protection Teams and NHS England Screening and Immunisation Teams

We will continue to see imported measles cases in England with a risk of limited onward spread in communities with low coverage and in age groups with very close mixing. The Romanian community and those travelling to Romania and Italy are at particular risk of acquiring measles infection. Experience from recent outbreaks in this community shows that, despite living in the UK for a number of years, many recent cases have been unvaccinated, and that families are often not registered with a GP practice.

PHE Health Protection Teams (HPTs) should note this when undertaking risk assessments of suspected cases and are reminded to enter travel contexts on HPZone. In addition the '*Measles 2017*' congregation context should be used for all measles cases (possible, probable, confirmed) entered on HPZone since 1 January 2017. HPTs should also be aware that the revised *National Measles Guidelines* [5] and the *Guidelines on Post-exposure Prophylaxis for Measles* [6] were published in August of this year. In addition HPTs are reminded to follow the *Measles guidance on international travel and travel by air* [7].

In order to monitor importations and chains of transmission it is essential that every suspected case is tested with an Oral Fluid Test (OFT); this includes cases that are confirmed locally. In the July to September quarter an oral fluid sample was taken on only 64% of all suspected measles cases, well below the 80% WHO target.

Health Protection Teams and NHS England local teams should work together to raise awareness of the current measles situation within the local health economy to improve case ascertainment and ensure prompt public health action. GPs should note that recent travel to countries with ongoing measles outbreaks like Romania, Italy and Germany increases the likelihood of a measles diagnosis.

GPs should also be reminded that patients over the age of three years and four months who do not have two recorded doses of MMR vaccine remain eligible. There is no upper age limit to offering MMR vaccine and practices should maximise opportunities to ensure that patients are fully vaccinated:

- catching up children aged 15 years or younger is covered under the global sum
- an item of service fee can be claimed manually via the CQRS MMR programme (aged 16 and over) for each dose of MMR administered to patients aged 16 years or over. This includes patients born before 1970 who have no history of measles or MMR vaccination.

It should be noted that central MMR vaccine stock can be used to catch-up anyone of any age.

PHE has developed *Think measles* posters and leaflets and *MMR* leaflets directly targeting teenagers and adults that can be ordered free via the Health and Social care order line (See resources). In addition we have produced social media banners which are available to anyone wishing to promote the MMR vaccination and are suitable for Twitter, Facebook and can be used on the Jayex and other brands of digital displays. If you want a copy of them to use locally please email Cherstyn Hurley cherstyn.hurley@phe.gov.uk.

In response to the current outbreaks the regional communication teams have adapted information materials from Public Health Wales, using simple language and images, which are also translated into Romanian. These can be accessed here: <https://www.gov.uk/government/publications/measles-outbreak>

NHS England local teams are also asked to:

- i) work with Local Authority partners to get measles and MMR messages out to the Romanian community in a sensitive and acceptable way and to ensure adequate access to immunisation services (particularly for those who are unregistered and if possible ahead of travel in the upcoming holiday period). Assess the need to extend this to other under-vaccinated communities.

- ii) work with local commissioners of health visiting and school immunisation services to ensure that 'routine immunisation checks' are embedded within local contracts
- iii) communicate with local commissioners and providers of health visiting and school immunisation services to raise awareness about the ongoing measles outbreaks in Europe and the need to opportunistically check MMR status among teenagers and young adults and to refer un- or under-immunised individuals for catch-up

Implications and recommendations for PHE sites and services

Regional public health laboratories (PHL) should forward all measles IgM and / or measles PCR positive samples to the Virus Reference Department (VRD) at Colindale for confirmatory testing and characterisation as per National Measles Guidelines [5]. This is an essential component of the enhanced measles surveillance in place to monitor progress towards WHO elimination targets.

Implications and recommendations for local authorities

Local authority public health teams and NHS England local teams should work together to urgently raise awareness of measles and MMR among the Romanian community ahead of Christmas travel. It should be noted that any communication should be sensitive to community needs and non-stigmatising. In addition opportunities should be identified for strengthening messages around measles and MMR with other communities known to have historically low MMR uptake such as the Steiner community, Orthodox Jewish community and Traveller community.

References / Sources of information

1. WHO Regional Office for Europe. Press release: Measles no longer endemic in 79% of the WHO European Region. Copenhagen, 26 September 2017. Available here: <http://www.euro.who.int/en/media-centre/sections/press-releases/2017/measles-no-longer-endemic-in-79-of-the-who-european-region>
2. European Centre for Disease Prevention and Control. Monthly measles and rubella monitoring report. October 2017. Available from : <https://ecdc.europa.eu/sites/portal/files/documents/measles-rubella-monthly-monitoring-report-october-2017.pdf>
3. WHO Regional Office for Europe. Press release: Measles outbreaks across Europe threaten progress towards elimination. Copenhagen, 28 March 2017. Available here: <http://www.euro.who.int/en/media-centre/sections/press-releases/2017/measles-outbreaks-across-europe-threaten-progress-towards-elimination>
4. Measles outbreak linked to European B3 outbreaks, Wales, United Kingdom, 2017 Eurosurveillance, 22 (42) published 19 October 2017 Available from: <http://ecdc.europa.eu/content/10.2807/1560-7917.ES.2017.22.42.17-00673?emailalert=true>
5. Public Health England (2017). National Measles Guidelines. Available from: <https://www.gov.uk/government/publications/national-measles-guidelines>
6. Public Health England (2017). Guidance for measles post-exposure prophylaxis. Available from: <https://www.gov.uk/government/publications/measles-post-exposure-prophylaxis>
7. Public Health England. (2012). Measles guidance on international travel and travel by air Available from: <https://www.gov.uk/government/publications/measles-public-health-response-to-infectious-cases-travelling-by-air>

Free copies of PHE leaflets and posters can be ordered by following the link to the Health and Social care

Orderline: https://www.orderline.dh.gov.uk/ecom_dh/public/contact.jsf Alternatively, you can call **0300 123 1003**.

1. Think measles leaflet - product code 3205760 <https://www.gov.uk/government/publications/think-measles-patient-leaflet-for-young-people>
2. Think measles poster - product code 3205852 <https://www.gov.uk/government/publications/think-measles-poster-about-measles-in-young-people>
3. Call ahead measles poster – product code 3207737 <https://www.gov.uk/government/publications/think-measles-poster-for-young-people>
4. Pregnancy leaflet – product code 2903655 <https://www.gov.uk/government/publications/pregnancy-how-to-help-protect-you-and-your-baby>
5. Have you had your MMR flyer (for mums who have just given birth) Product code:3325595 <https://www.gov.uk/government/publications/mmr-vaccination-have-you-had-your-mmr>
6. MMR leaflet – product code: 3219250 <https://www.gov.uk/government/publications/mmr-for-all-general-leaflet>
7. Measles EIW poster – product code: 2900430 <https://www.gov.uk/government/publications/measles-dont-let-your-child-catch-it-poster>