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Measles: A Webinar to update teams working in secure settings

Dr Chantal Edge
National Lead for Health & Justice, UKHSA

Background

- Measles is currently increasing in Europe and in the UK, and most regions have reported measles cases during 2023.
- In the UK, there is a growing number of people who have no immunity to measles as they have not received two doses of the Measles, Mumps and Rubella (MMR) vaccine.
- Within the H&J settings, we generally see a lower uptake of vaccination compared to the general population and early results from UKHSA serological studies suggest measles immunity is sub-optimal
- UKHSA wrote to stakeholders in June 2023 to reiterate the risks posed by measles to secure settings and to prompt action

Agenda for today

	Agenda
1	**Welcome and aim** Dr Chantal Edge, National Lead for Health and Justice, Health Equity and Inclusion Health Division, UK Health Security Agency (5 mins)
2	**Update on measles - epidemiology, prevention and preparedness** Dr Vanessa MacGregor, Consultant in Communicable Disease Control UK Health Security Agency (East Midlands) (20 minutes)
3	**NHS National MMR vaccination programme** Laura Hope, Head of Immunisation, Public Health Commissioning and Operations NHS England (15 mins)
4	**Input from HMPPS HQ Public Health Team** Rupert Bailie, Public Health Lead HMPPS (15 minutes)
5	**Question and answer session** Facilitators: Laura Spowage, Health and Justice Programme Manager, Healthcare Public Health NHS England (Midlands East) Ian Palmer, Public Health Manager, Health and Justice, Health Equity and Inclusion Division, UK Health Security Agency
6	**Close and next steps** Laura Spowage, Health and Justice Programme Manager, Healthcare Public Health NHS England (Midlands East)

Housekeeping

Please type any questions in the chat. These will be answered during the Q&A session at the end of the webinar.

This webinar will be recorded and shared along with the slides after the webinar

A survey will be posted in the chat at the end of the webinar. We welcome your feedback and invite you to submit your thoughts, comments and suggestions for future sessions

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Update on Measles - epidemiology, prevention and preparedness in adult, children and young people places of detention.

Dr Vanessa MacGregor, Consultant in Communicable Disease Control
with thanks to Vanessa Saliba (UKHSA) & Rebecca Cordery (UKHSA)

October 2023

Outline

- Key facts and Clinical features
- Current picture
- Notification and Risk assessment
- Case definition and Testing
- Actions: Contact Tracing, PEP, Contact Isolation, Exclusion, Restrictions, Visitors and Outbreaks
- Communications
- Resources
- Questions

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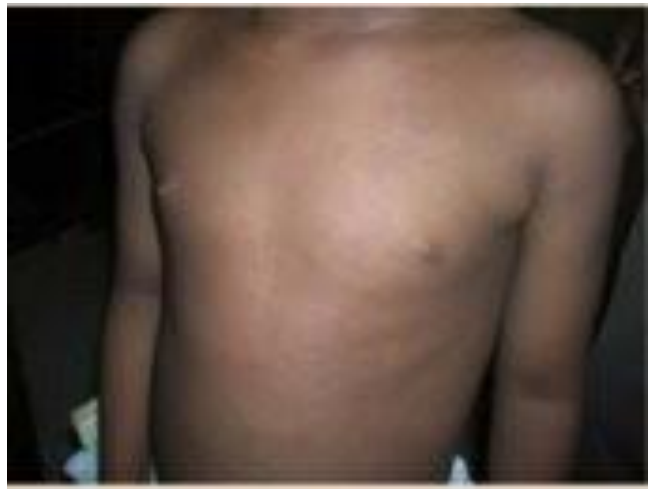
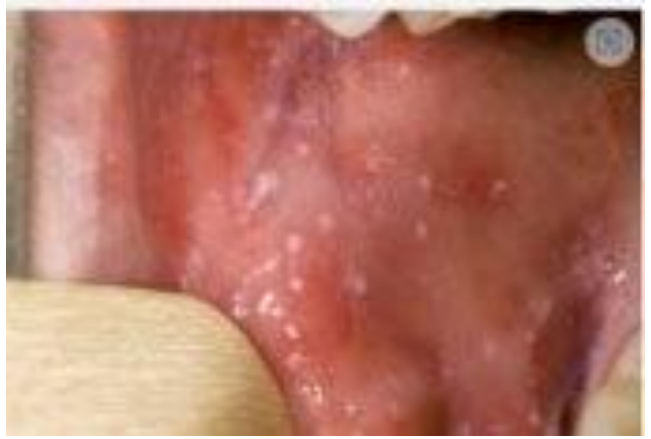
Key facts and clinical features

Measles key facts





- Historically – common childhood infection
- highly infectious:
  - one of the most contagious agents known
  - R0 (basic reproduction number) ~ 15 – 20
- respiratory transmission: droplet spread by close contact, coughing and sneezing
- vaccination has had a major impact on measles deaths:
  - between 2000 and 2020, global measles mortality decreased by 94%
- despite an effective vaccine for >50 years it remains a leading cause of death and disability among young children globally
  - 20-40% of cases in the UK are hospitalized (rate varies by age)
- measles outbreaks can serve as a tracer indicator “canary in the coal mine” of gaps in national immunisation programmes and health inequalities

Clinical features of measles

Incubation period: 10-12 days [7-21]

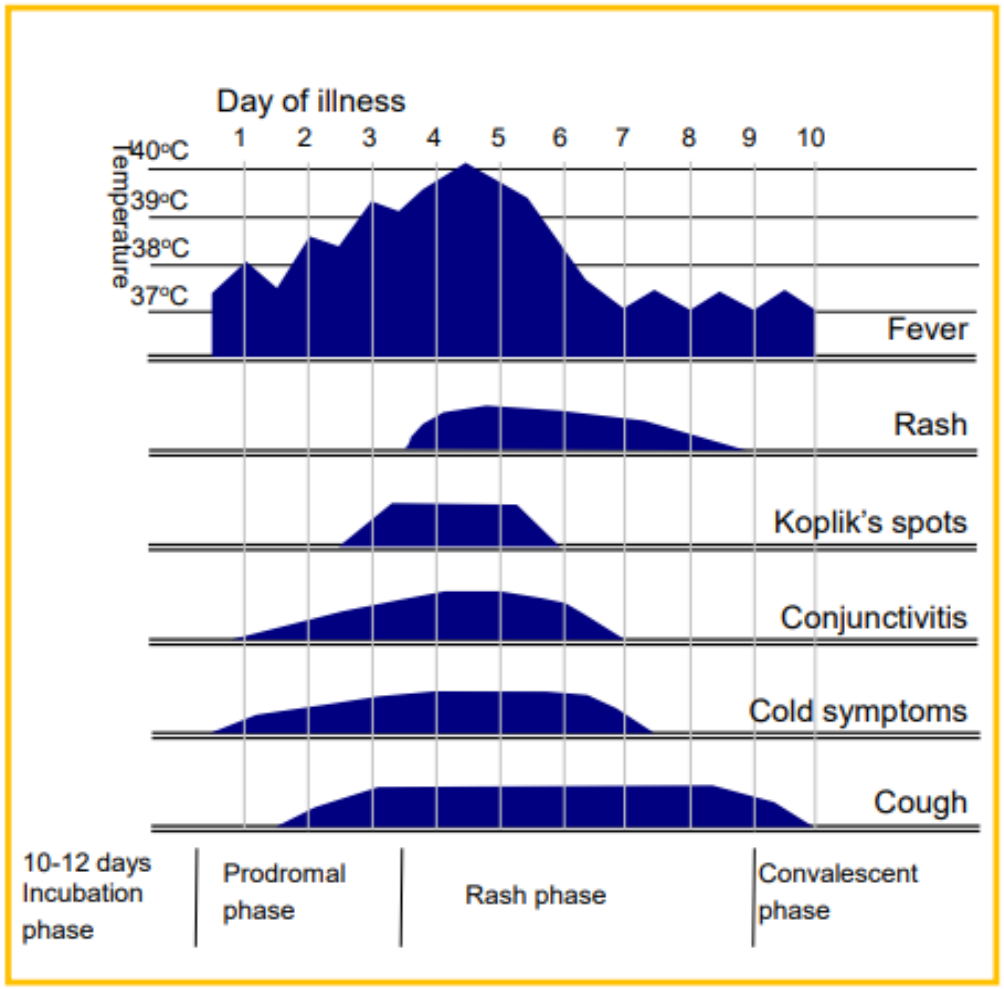
Prodromal illness:

- fever + the 4 Cs
- cough
- coryza
- conjunctivitis
- cranky child

Rash – maculopapular d14

Complications (up to 30% of cases – highest in infants and adults)

- otitis media
- bronchitis
- pneumonia/pneumonitis
- encephalitis and neurological sequalae
- prolonged immunosuppression – predisposes children to other infections



Subacute sclerosing panencephalitis (SSPE) rare - present a few years after infection with progressive neuro-cognitive symptoms which are fatal. Risk highest in those infected before the age of 1 year.

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Current Picture

UK Measles and Rubella elimination strategy

Refresh of national implementation plan – 4 pillars:

1. Strengthen routine programme <5 years: 95% uptake 2MMR
2. Catch-up 5-25 year olds: 95% uptake 2MMR
3. Strengthen surveillance >80% of cases testing with Oral Fluid Kit
4. Easy access to high quality information for health professionals and the public

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Notification and Risk Assessment

Notification

- Measles is a notifiable disease
- All suspected cases should be reported promptly to the local Health Protection Team (HPT) (Contacts: UKHSA health protection teams - GOV.UK (www.gov.uk)
- The Health Protection Team will undertake the following:
  - Risk Assessment
  - Testing advice
  - Public health actions
  - Advice on control measures

HPT Risk Assessment

With reporting clinician:

- Signs and Symptoms (fever, cough, coryza, conjunctivitis, rash)
- Immunisation history

With PPD Healthcare/Manager:

- When case entered PPD
- Travel history (UK and abroad)
- Contact with cases of measles
- Attendance at mass gatherings (if new reception)
- Member of or contact with under-immunised community such as traveller community, Steiner Community, Orthodox Jewish community

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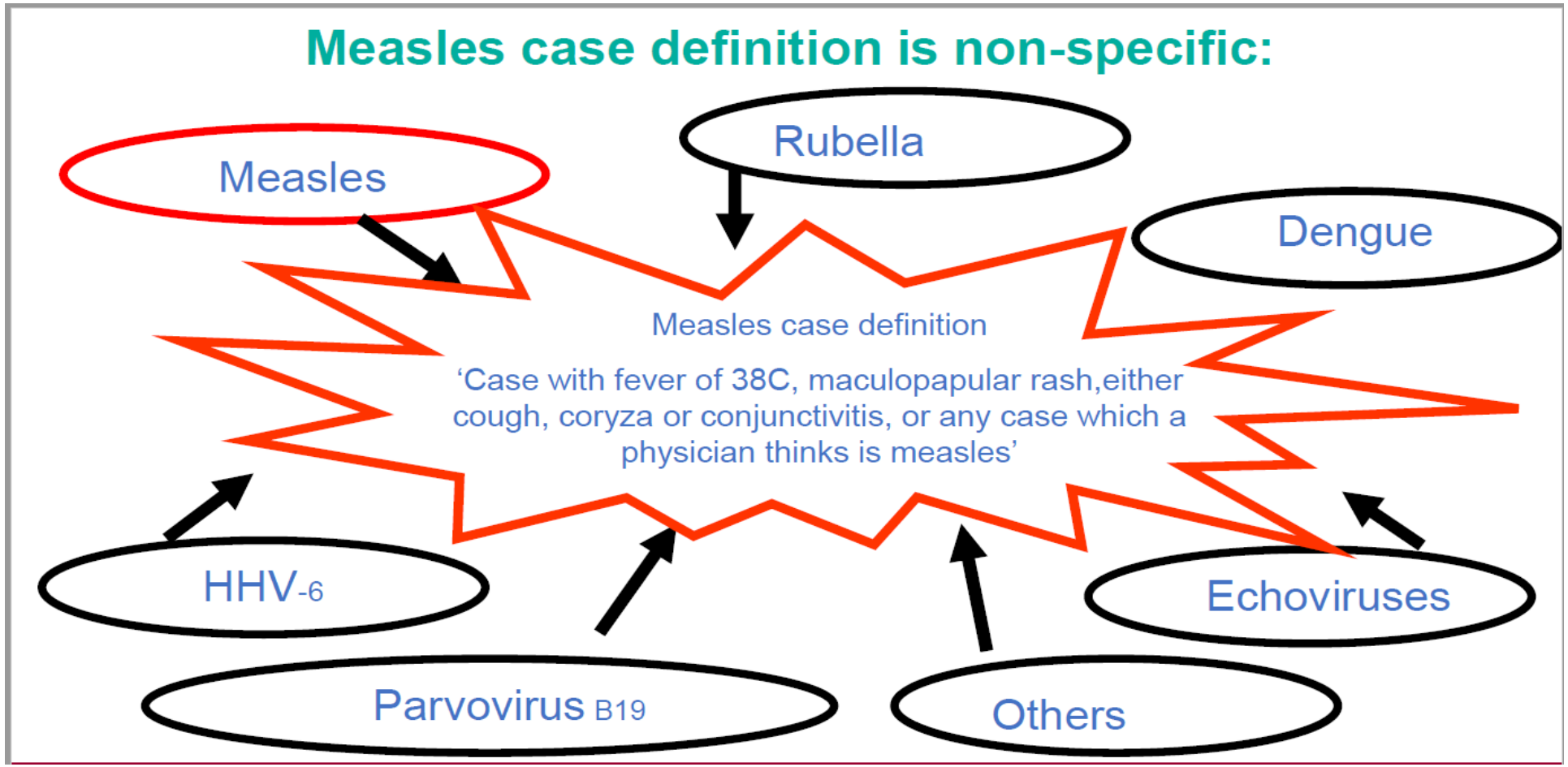
Case Definitions and Testing

Case Definitions

- **Laboratory confirmed case of measles:** a suspected case with evidence of laboratory confirmation of acute measles infection (that is measles IgM in blood or oral fluid (OF) in the absence of recent vaccination, or confirmed wild-type measles RNA in any clinical specimen)
- **Epidemiologically confirmed (probable) case of measles:** a suspected case of measles who has a direct epidemiological link to a confirmed case of measles (that is where the onset of symptoms occurred within 7-21 days of exposure), or related to another epidemiologically confirmed case (for example in an outbreak setting)
- **Likely (probable) case of measles:** a clinically typical case of measles with epidemiological features that either increase the likelihood of the patient having been exposed and/or favour the diagnosis of measles relative to other causes of rash illness
- **Unlikely (possible) case of measles:** a suspected case of measles which does not meet the definition of a likely case, either because it is clinically atypical or because the epidemiological context is not suggestive of measles

Differential Diagnoses: Importance of testing/discarding rash-illness



Infectious mononucleosis

Scarlet fever

Zika

Chikungunya

Testing

- Cases assessed by health care and not admitted to hospital:
  - Non-urgent testing: the HPT will arrange for an oral fluid kit to be sent to healthcare to assist the case with a self-administered test (arrangements may vary by area). This is the gold standard test and samples will undergo the following tests: serology for IgG and IgM, PCR and genotyping
  - Urgent testing: arrangements may vary by area so PPDs should consult with their local HPT

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Actions:

Contact Tracing
Post exposure prophylaxis
Contact Isolation
Exclusion
Restrictions
Visitors
Outbreaks

Immediate Actions (all PPD settings)

- Isolation of case in a single room/cell until at least 4 full days after rash onset (day 0 is day of onset of rash).
- The door must be kept closed.
- Non-immune staff should **NOT** attend the case. Staff caring for measles case must have a history of immunity or have had two documented MMR vaccinations.
- Meals, medications, school work must be taken to the room/cell.
- Where single accommodation is not possible, ensure case is isolated with fully vaccinated individual.
- Cohorting may also be considered as an alternative.
- Exclusion from work/education
- Ensure the resident is provided with information about measles which is accessible based on literacy and language requirements.
- Immunosuppressed individuals may be infectious for longer and may not display typical symptoms, and so timings should be adjusted as appropriate in consultation with clinicians managing the case's immunosuppression.
- Staff attending to patients with suspected or confirmed measles infection should wear appropriate PPE as per their organisational occupational health guidance

Children & Young People Settings

- Check immunisation status on reception & offer x2 MMR vaccines if unvaccinated (1 month apart) or no records available
- There may be significant competing welfare risks that may make complete isolation difficult e.g. significant risk of self-harm if a child/young person is completely isolated. The setting & HPT to undertake a risk assessment on an appropriate and proportionate response in such circumstances
- Exclusion from education & shared living space

Mother and Baby Settings

- Check immunisation status on reception, pregnant ladies are unable to receive the MMR vaccination until after the baby has been born
- Post exposure prophylaxis can be administered to pregnant ladies & infants <12 months if in contact with a case
- Isolation of case in room, keep Mother and baby together
- Exclusion from shared living space

Contact Tracing

Contacts may include:

- Setting contacts – other residents, secure estate staff, health care staff
- Visitor contacts – visiting support staff, visitor family & friends
- Outside contacts – community contacts, work/education contacts, courts (including transport staff), police, probation, and healthcare/support staff

Contact tracing for the infectious period should focus primarily on:

- Close (household) contacts including those sharing rooms/ cells/small shared spaces in smaller homes
- Face to face contact of any length
- Contacts for more than 15 minutes in a small, confined area (e.g. classroom) (unless immunocompromised contact in which case, any time in a confined area)
- Poorly defined contacts e.g. other inhabitants on the same section of the secure setting should be assessed for the presence of immunosuppressed individuals (as these should be managed as close contacts and rapidly assessed for post- exposure prophylaxis)

Post Exposure Prophylaxis (PEP)

The HPT will assist to identify contacts in the following order of priority:

- 1. Immunosuppressed contacts
- 2. Pregnant women and infants <12 months
- 3. Health care workers
- 4. Healthy contacts
- Contacts who are immunosuppressed, pregnant or infants< 12 months will require assessment for Human Normal Immunoglobulin (HNIG) or Intravenous Immunoglobulin (IVIG)
- If HNIG required, discuss with the local Health Protection Team or NHS Trust
- MMR vaccination can be offered to any healthy contact who is unvaccinated or incompletely vaccinated and not likely to be immune. Link to green book: Measles: the green book, chapter 21 - GOV.UK (www.gov.uk)

Contact Isolation & Exclusion Requirements

Staff contacts (including secure setting staff and healthcare staff)

- Consider whether staff exposed to a confirmed or likely (probable) case, who do not have satisfactory evidence of measles immunity, should be excluded from work from the 5th day after the first exposure to 21 days after the final exposure.
- If staff are tested rapidly after exposure, they can continue to work if found to be measles IgG positive within 7 days of exposure (as this is too early to be due to infection from the recent exposure).
- Where MMR vaccine is given post-exposure, it is unlikely to prevent the development of measles but if the staff member remains symptom-free for at least 14 days after MMR was given, they can return at that stage

Depending on the risk assessment and where staffing levels might lead to concerns for resident safety, the following parameters might be considered for non-healthcare staff:

- If staff member has history of 1xMMR (or measles containing vaccine) they can continue to work but should be excluded if they feel at all unwell.
- If staff member gets an MMR dose within 72 hours of exposure, they can continue to work but should be excluded if they feel at all unwell.

Contact Isolation & Exclusion Requirements

Resident contacts

Consideration should be given to isolation or exclusion from activities for:

- Residents for whom you cannot confirm adequate vaccination status or immunity and who have had household style contact with the confirmed / likely (probable) case (e.g., cell/room mate)
- Residents for whom you can’t confirm adequate vaccination status or immunity and who have had face-to-face contact or contact for more than 15 minutes in a small confined area with the confirmed or likely (probable) case
- Note that the duration of these limitations may be dependent on testing and vaccination strategies (as detailed in staff section above)

PPD staff (health & residential)

- If an unvaccinated staff member, or a staff member with no immunisation evidence, is identified as a contact of a case of measles they are required to remain off work for 21 days

- Proactively reviewing all occupational health records and recalling staff for vaccination is encouraged

- Occupational vaccination requirements are outlined in the Green Book, chapter 12

Restriction of Transfers, Receptions & Courts

- Settings should not transfer symptomatic residents to other settings
- Settings should not transfer asymptomatic residents to other settings during an outbreak due to the risk of people having asymptomatic infection/incubating infection. If this is unavoidable, then the receiving PPD should be informed of the outbreak before any movements happen and provide single cell accommodation for the incoming resident until incubation period has passed
- If possible, new receptions to a setting should be avoided during an outbreak. If this is not possible new receptions who are in a risk group should be isolated from the rest of the setting population until the outbreak is declared over
- Cases should not attend court hearings in person

Visitors

- Cases should not receive visitors
- During an outbreak staff should provide advice to visitors to advise them not to attend the setting if they are symptomatic or vulnerable

Outbreaks

Outbreak and Incident Meeting

- Consider an outbreak control team (OCT) or incident management team (IMT) meeting if 2 or more cases are linked by time and place within 7-21 days or if mass vaccination is being considered following a single case or where large numbers of vulnerable contacts are identified

Considerations for risk assessment:

- number of cases
- vulnerability of population (age/comorbidity) specific to setting
- vaccine uptake
- staffing levels
- environmental factors which may impact transmission (e.g. setting layout)
- severity of illness

In an outbreak an urgent vaccination campaign should be considered. Vaccination of all susceptible individuals will limit the risk of tertiary transmission within the setting

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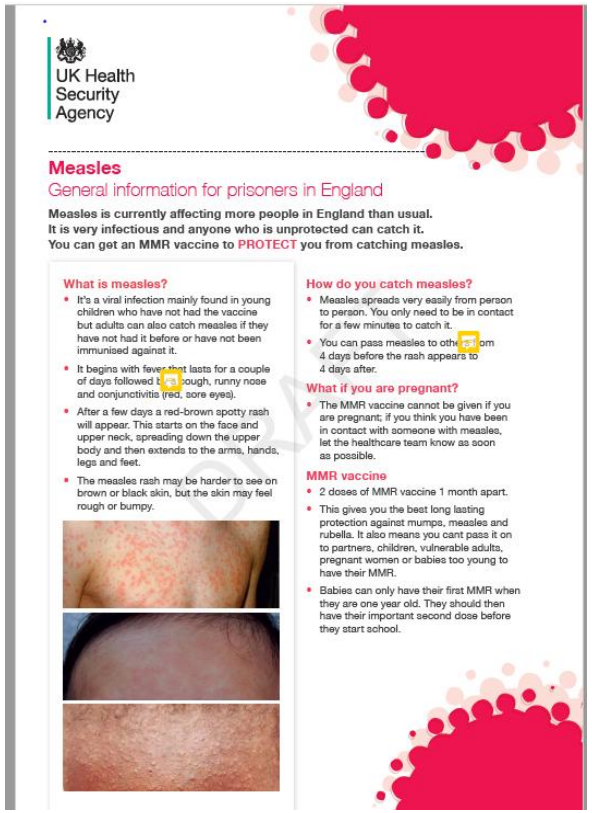
Communications

Measles – UKHSA Communications work

National Comms has produced measles social media assets

- Assets are used on national and regional Twitter accounts and other national comms channels
- Assets are available to comms stakeholders to do original posts or they can re-post UKHSA regional and national posts

Measles assets for secure settings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Measles

General information for prisoners in England

Measles is currently affecting more people in England than usual.
It is very infectious and anyone who is unprotected can catch it.
You can get an MMR vaccine to PROTECT you from catching measles.

What is measles?

- It's a viral infection mainly found in young children who have not had the vaccine but adults can also catch measles if they have not had it before or have not been immunised against it.
- It begins with fever that lasts for a couple of days followed by a cough, runny nose and conjunctivitis (red, sore eyes).
- After a few days a red-brown spotty rash will appear. This starts on the face and upper neck, spreading down the upper body and then extends to the arms, hands, legs and feet.
- The measles rash may be harder to see on brown or black skin, but the skin may feel rough or bumpy.

How do you catch measles?

- Measles spreads very easily from person to person. You only need to be in contact for a few minutes to catch it.
- You can pass measles to others from 4 days before the rash appears to 4 days after.

What if you are pregnant?

- The MMR vaccine cannot be given if you are pregnant; if you think you have been in contact with someone with measles, let the healthcare team know as soon as possible.

MMR vaccine

- 2 doses of MMR vaccine 1 month apart.
- This gives you the best long lasting protection against mumps, measles and rubella. It also means you cant pass it on to partners, children, vulnerable adults, pregnant women or babies too young to have their MMR.
- Babies can only have their first MMR when they are one year old. They should then have their important second dose before they start school.

General Information for Prisoners in England


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NHS

A guide to measles for visitors to prison

Measles is circulating is very infectious and can be serious if you are pregnant, are immunocompromised or under 1 year of age.

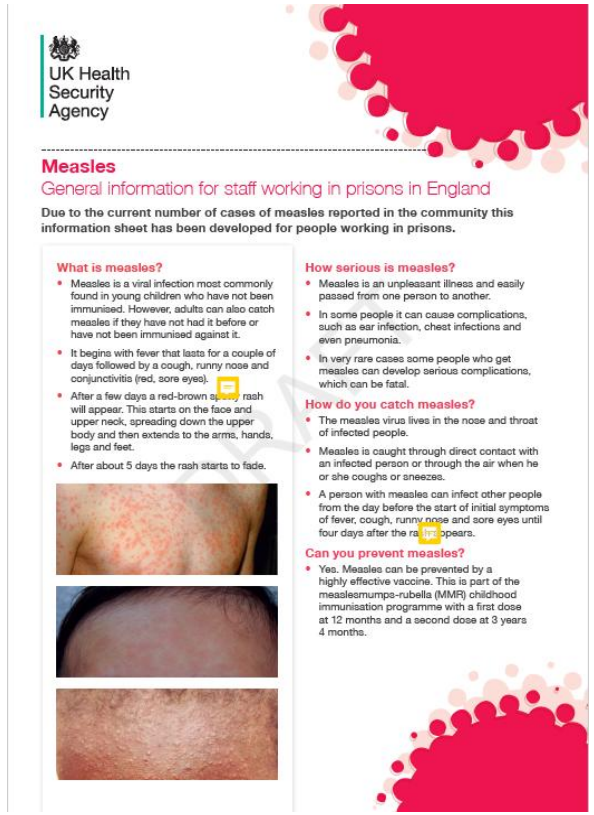
The number of young people catching measles has risen. It's never too late to be vaccinated.

You need two doses of MMR one month apart to be fully protected against measles, mumps and rubella. It's time to make measles a disease of the past.

If you or your child have symptoms of measles, stay at home and phone your GP or NHS 111 for advice.

STAY AWAY from GP surgeries and A&E departments – you could spread the illness to others.

A guide to Measles for visitors to prison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Measles

General information for staff working in prisons in England

Due to the current number of cases of measles reported in the community this information sheet has been developed for people working in prisons.

What is measles?

- Measles is a viral infection most commonly found in young children who have not been immunised. However, adults can also catch measles if they have not had it before or have not been immunised against it.
- It begins with fever that lasts for a couple of days followed by a cough, runny nose and conjunctivitis (red, sore eyes).
- After a few days a red-brown spotty rash will appear. This starts on the face and upper neck, spreading down the upper body and then extends to the arms, hands, legs and feet.
- After about 5 days the rash starts to fade.

How serious is measles?

- Measles is an unpleasant illness and easily passed from one person to another.
- In some people it can cause complications, such as ear infection, chest infections and even pneumonia.
- In very rare cases some people who get measles can develop serious complications, which can be fatal.

How do you catch measles?

- The measles virus lives in the nose and throat of infected people.
- Measles is caught through direct contact with an infected person or through the air when he or she coughs or sneezes.
- A person with measles can infect other people from the day before the start of initial symptoms of fever, cough, runny nose and sore eyes until four days after the rash appears.

Can you prevent measles?

- Yes. Measles can be prevented by a highly effective vaccine. This is part of the measlesmumps-rubella (MMR) childhood immunisation programme with a first dose at 12 months and a second dose at 3 years 4 months.

General information for staff working in prisons in England

Resources

1. UKHSA National measles guidance: https://www.gov.uk/government/publications/national-measles-guidelines
2. UKHSA Guidance on Post-Exposure Prophylaxis for measles: https://www.gov.uk/government/publications/measles-post-exposure-prophylaxis
3. UKHSA Measles guidance on international travel and travel by air: https://www.gov.uk/government/publications/measles-public-health-response-to-infectious-cases-travelling-by-air
4. Measles Green Book Chapter: https://www.gov.uk/government/publications/measles-the-green-book-chapter-21
5. Immunisation of healthcare and laboratory staff: the green book, chapter 12: https://www.gov.uk/government/publications/immunisation-of-healthcare-and-laboratory-staff-the-green-book-chapter-12
6. Health and Social Care Act 2008: code of practice on the prevention and control of infections: https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance
7. UKHSA Quarterly vaccine coverage statistics (COVER) – routine childhood programme: https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2022-to-2023-quarterly-data

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UKHSA Communications team

Measles, Mumps and Rubella (MMR) National Vaccination Programme

Secure Settings Webinar 12 October 23

Presented by:
Laura Hope, Head of Public Health Commissioning - Immunisations

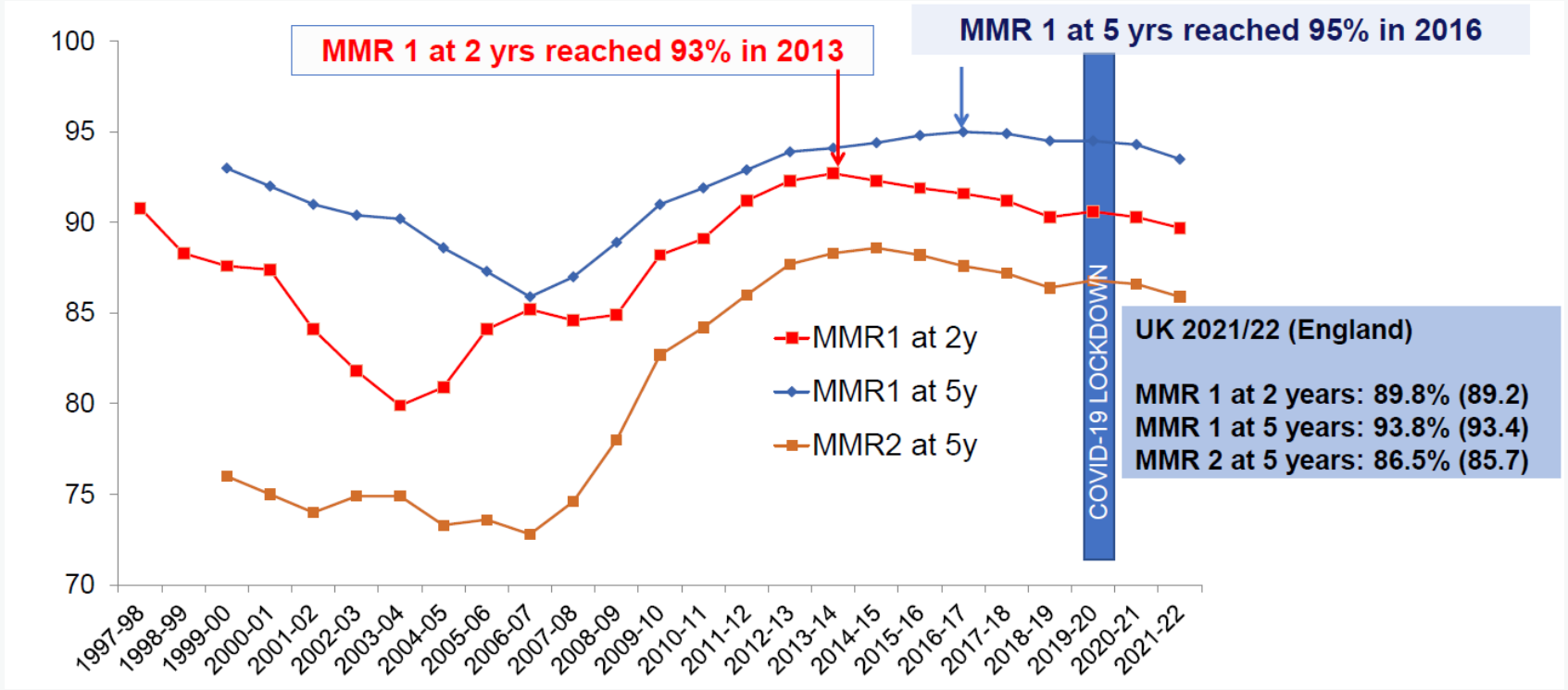
Introduction

- Increasing uptake and coverage in the MMR
- Regaining measles elimination status is a key priority for the NHS
- Herd Immunity
- WHO target of 95% coverage in the population of two doses of MMR vaccine by 5 years to be reached.

This presentation covers delivery of the routine programme in all settings

MMR uptake at two and five years, 1997/8 to 2021/22

While uptake of the first MMR vaccination at 5 years of age is over 90%, we have seen a steady decline in families coming forward in recent years with variation across regions and a rise in measles cases.



The WHO target for the MMR vaccine is 95% at 5 years.

Source: Childhood Vaccination Coverage Statistics – 2020-1 Annual National Official Statistics, NHS Digital, UKHSA.

Background

- The UK has one of the most comprehensive immunisation programmes in the world
- Performance varies in regions
- Disparity within inclusion health groups such as people in contact withing the criminal justice system.

National MMR Vaccination Programme

The MMR Vaccination is given to babies and young children as part of the NHS Routine Vaccination Schedule.

There is also a School Aged MMR catch-up vaccination programme delivered alongside other school aged vaccinations such as HPV, MenACWY & Tetanus Booster

Children are invited into their GP surgery for vaccination when due.

Childs Age	**Vaccination**
1 Year	MMR (1st Dose)
3 years and 4 months, before the child goes to school	MMR 2nd Dose

National MMR Vaccination Programme

- GP contract
- Green book
- Community setting
- Various Providers eg Trusts, Community Providers, Independent Providers.
- Signposting

There is no upper age limit to offering the MMR vaccination and adults who are not protected should also be caught up.

- ***This includes patients born before 1970 who have no history of measles or MMR vaccination.***

Potential Barriers

We recognise vaccination uptake can be affected due to:

- Vaccine hesitancy
- Not being registered with a GP
- Transient population
- Lack of vaccination history
- Health Inequalities

Recommendations to Improve MMR Uptake in Secure Settings

- new entrants from abroad should have their immunisation history checked
- new arrivals (inc transfer)
- post-natal women should have their *MMR vaccine history* checked
- is delivered and supported by suitably trained staff
- Healthcare Professionals should work in partnership and liaise with secure setting Health Champions/Peer Support Workers and encourage discussions about the benefits of vaccination to address any concerns.
- As part of NHSE MR elimination plans, MMR national call and recall to support catch up is planned for Q4 2023-24. NHSE are currently progressing the offer of NHS MMR resources to the commissioners and providers of settings excluded from national call and recall that could benefit from NHSE outputs and may wish to run catch up initiatives in parallel with the wider campaign.
- 'Make Every Contact Count (MECC)

Algorithm - https://www.gov.uk/government/publications/vaccination-of-individuals-with-uncertain-or-incomplete-immunisation-status

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