

# Management of Measles Outbreak – our hospital experience

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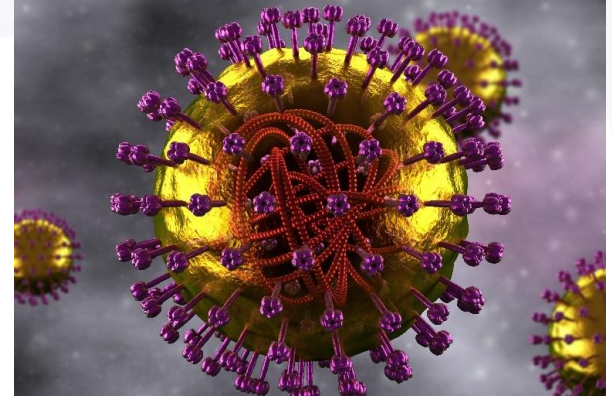
[@SarahWi8700623](#) [@uhbipc](#)

# Overview

- Birmingham outbreak
- Hospital and Local Area response
- Challenges & learning

# What is measles?

- Measles is an enveloped RNA virus
  - A Morbillivirus in the Paramyxoviridae family
- Humans are the only natural hosts of measles virus
- Measles is one of the most contagious diseases
  - R value 12-18 vs COVID-19 R value 2-6
  - 9/10 non-immune close contacts will get infected
- Complications
  - Common
    - otitis media, bronchopneumonia, laryngotracheobronchitis and diarrhoea
  - Serious
    - 1/1000 will develop acute encephalitis
    - 1-3/1000 children will die from respiratory/ neurological complications
    - Subacute sclerotising panencephalitis rare but fatal degenerative disease of CNS – develops 7-10 years after infection



Press release

## Measles outbreak could spread warns UKHSA Chief Executive

Measles can spread very easily among those who are unvaccinated, especially in nurseries and schools.

From: [UK Health Security Agency](#)

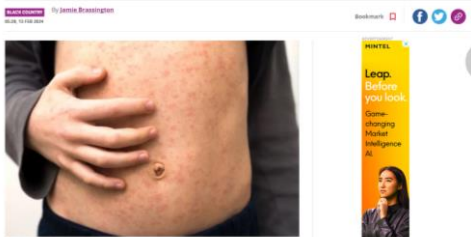
Published 19 January 2024



Further outbreaks of measles will spread to other towns and cities unless urgent action is taken to increase Measles, Mumps and Rubella (MMR) vaccination uptake in areas at greatest risk, the UK Health Security Agency's (UKHSA) Chief Executive is warning today during a visit to Birmingham, amid a rapid rise in cases in parts of the region since last October.

## Birmingham named UK measles hotspot - with 3 new cases a day

The ongoing measles outbreak in the West Midlands is a concern to health chiefs



Sick child with red rash spots from measles. Image: Getty Images

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## Measles cases continuing to rise



Dr Frances Dutton said challenges in the Sparkbrook area make it harder to get the message across

Katie Thompson  
BBC News

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## Man dies of measles in Ireland after 'trip to Birmingham'

Health officials have raised concern over an outbreak in West Midlands



BIRMINGHAM Solihull & Birmingham

Observer

DANIEL KEEL 5 DAYS AGO

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## Families urged to check vaccines are up to date following measles cases



Paul Fisher from UKHSA is urging residents to check they are up to date with their measles vaccination.

Solihull Editorial  
7th Dec 2023 0 Comments

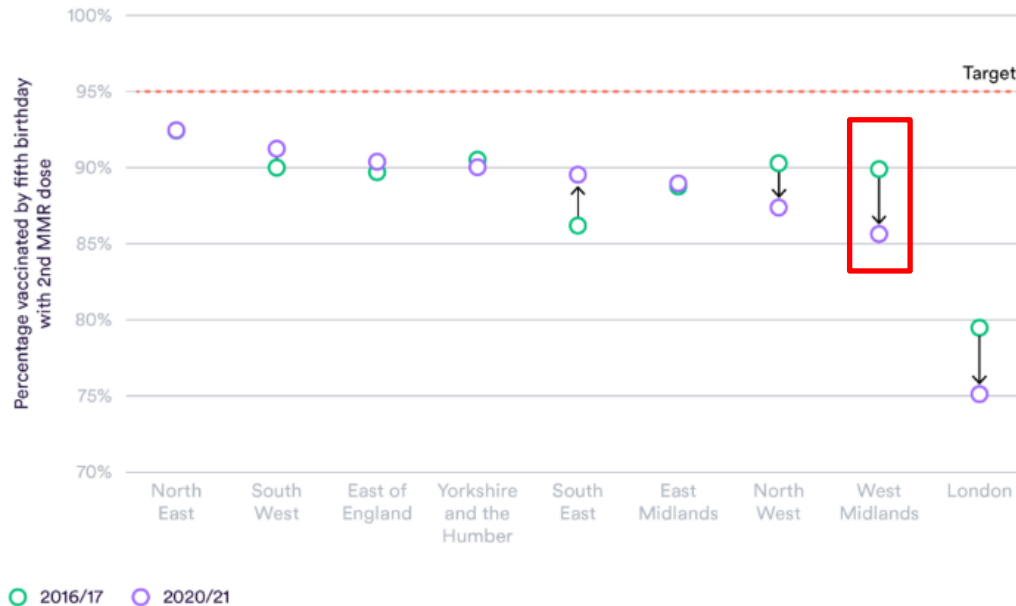
**RESIDENTS are being urged to check they and their family are up-to-date with their measles vaccinations following 19 confirmed cases in the West Midlands.**

The UK Health Security Agency (UKHSA) West Midlands has warned that number is likely to rise.

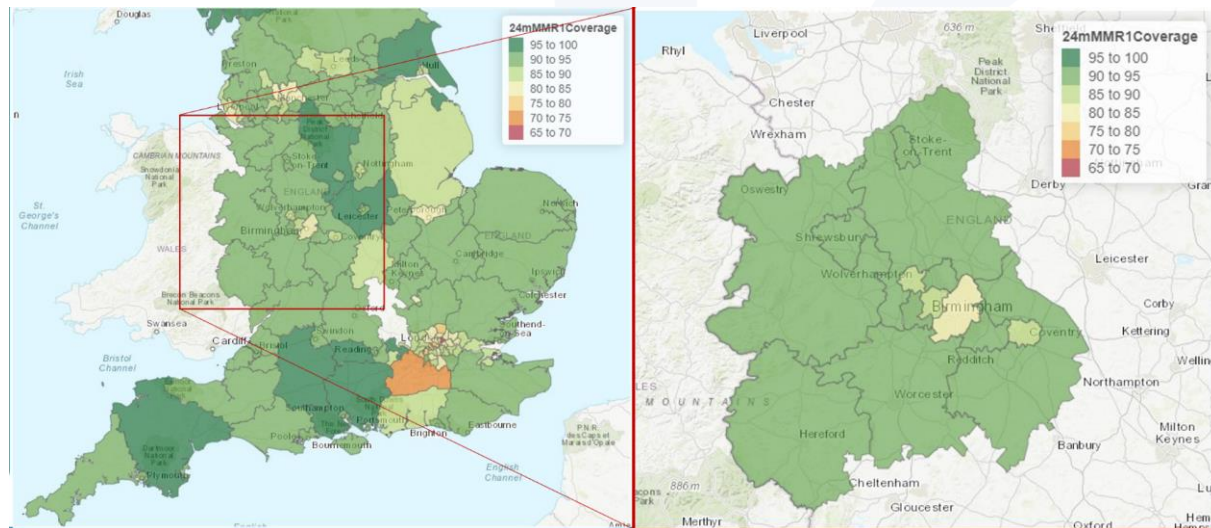
The agency said it was working with local authorities and NHS partners to ensure anyone in the region who needs a measles, mumps and rubella (MMR) vaccination is aware there is an increased risk of catching measles, following confirmed cases in Birmingham, Solihull and Coventry.

# National MMR uptake in England

Recent uptake of MMR in England (2021 to 2022) is below 90% for the first dose at 2 years of age and at 86% for 2 doses at 5 years of age, well below the  $\geq 95\%$  WHO target



# West Midlands MMR uptake

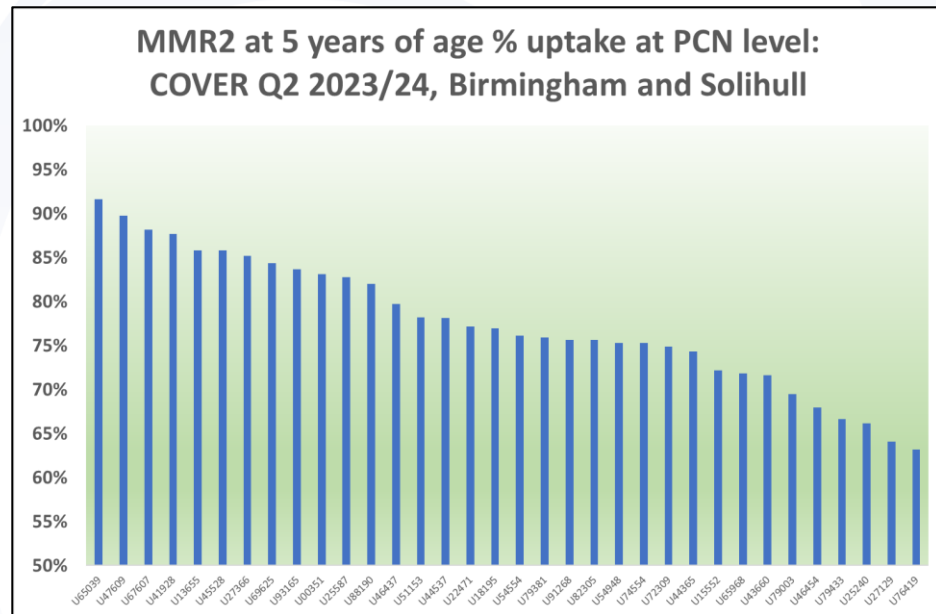


	MMR1 at 2 years
Herefordshire	94.5
Telford and Wrekin	92.4
Stoke-on-Trent	93.1
Shropshire	94.2
Birmingham	81.3
Coventry	88.2
Dudley	91.5
Sandwell	86.9
Solihull	92.8
Walsall	92.6
Wolverhampton	86.1
Staffordshire	93.7
Warwickshire	93.7
Worcestershire	93.8
Average	89.5

# MMR uptake within our local population

Wide variation in MMR uptake at primary care network level (63% to 92%) – multifactorial:

- Demographic - age, ethnicity, deprivation, physical or learning disability, homeless, and asylum seekers
- Hesitancy - low confidence in MMR vaccine safety/effectiveness and NHS services. High complacency (measles is not a risk to me). Lack of convenience (difficulty accessing MMR)
- Practice factors - MMR capacity, convenient appointments, proactively addressing parental concerns, promoting MMR



# Local strategy



**Contain:** rapid identification by clinicians, teachers, parents. Action to break chains of transmission, including self-isolation of unvaccinated contacts. Identifying and protecting vulnerable contacts (pregnant women, immunocompromised, infants under 1). “Warn and Inform” texts/ letters to contacts of cases. **Key responders: UKHSA regional team, Hospitals, Primary Care, Schools/ Nurseries etc.**



**Protect:** bespoke pop-up MMR in response to localised outbreaks, GP practice toolkits to increase MMR uptake including convenient tailored appointments, proactive conversations with concerned parents/patients and the offer of the non-porcine MMR in relevant communities. Reviewing vaccination levels in vulnerable communities (e.g. asylum hotels). **Key responders: ICB, Primary Care, NHSE.**



**Promote:** webinars / action cards for healthcare professionals, teachers and nurseries. Work with community organisations and faith groups to build trust / promote vaccination. Bespoke community outreach in areas of high prevalence / low vaccine coverage. Information in community languages (including Urdu / Arabic). Digital billboards, video clips from community leaders including local elected members. **Key responders: Integrated Care Board, local authorities, voluntary, community and faith organisations, schools/ nurseries etc.**



# Current situation

- National incident
- Local Birmingham outbreak
  - At time largest in UK
- 2023-present – 1,157 cases: 465 confirmed, 692 suspected
  - UHB has seen 269 of these (219 confirmed)

**\*\*\* General – Recipients Have Full Control \*\*\***

**West Midlands cases**

Figure 1: Confirmed measles cases by quarter, West Midlands, 2019 to 2024

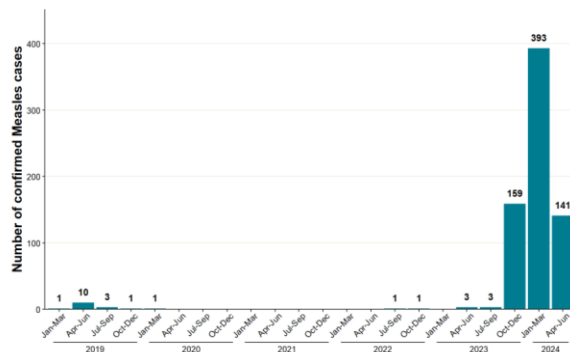
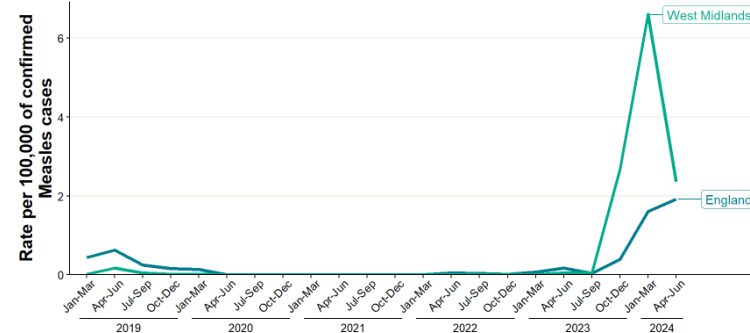
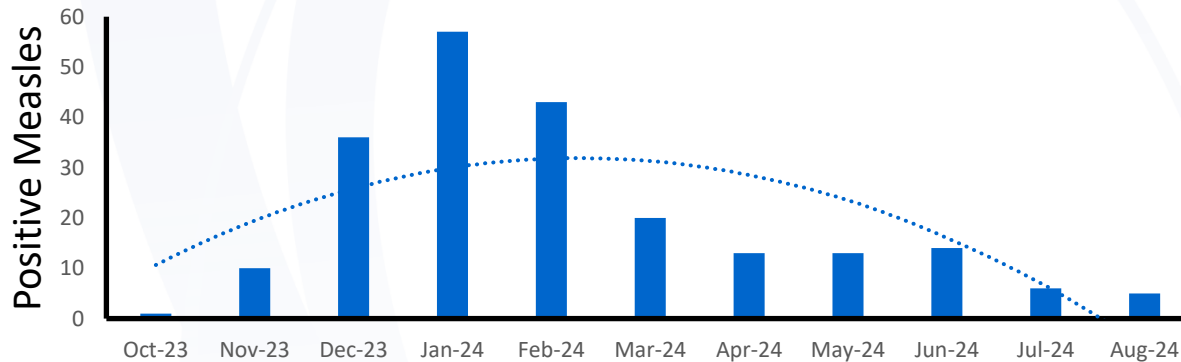


Figure 2: Incidence of confirmed cases of measles in West Midlands and England, 2019 to 2024

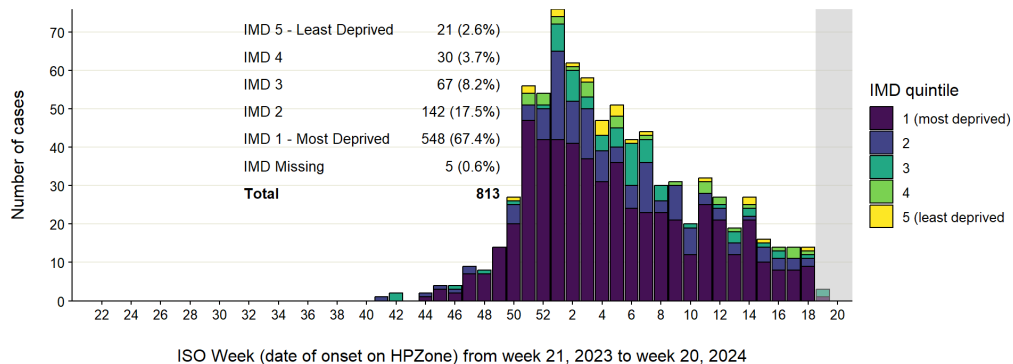
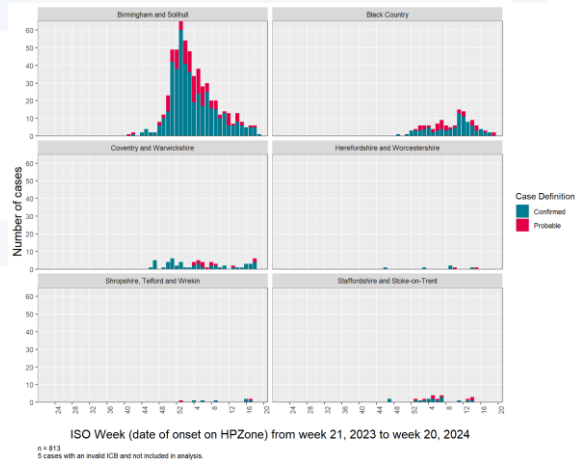


**UHB cases**



# Epidemiology

- Birmingham numbers peaked first week of January
  - UHB peaked second week of Jan with 23 cases
  - Had a second peak first week of Feb with 20 cases
- Cases declining now
- UHB cases
  - range from 3 months to 67yrs
  - 75% cases <18yrs – 30% admitted
  - 25% cases >18yrs - 85% admitted
  - x1 ITU case
  - x1 obstetric case & still birth
  - Highest number of inpatients x3-4
  - Severity varies, some with pneumonitis and oxygen requirement



# Challenges – some examples

- Clinical recognition
- Sampling and TAT
- Contact tracing workload
- Immunoglobulin administration
- Patient and staff immunity status
- Vaccine hesitancy

# Triage tool for paediatrics (BWCH)

Adults more tricky with  
>1,400 pts attending ED  
daily

This tool is intended to fast stream potential measles cases based on the most recent evidence and UKHSA regional guidance. The cases will be signposted to one of two allocated rooms to be clinically assessed for the likelihood of measles infection. This is NOT a diagnostic tool.

The person undertaking the screening must wear a face mask (FFP3). This should not be done by anyone who knows they are not immune to measles or are pregnant.

Tell Patient and family that **“We are screening for Measles because there are many cases in Birmingham at present; we are strongly advising that you wear a mask in our [hospital](#)”**



<p><b>Question 1a:</b> Is the patient vaccinated to measles / <a href="#">MMR</a> ?</p> <p>Action: If measles / MMR vaccination is evidenced, measles is very unlikely: no need to isolate.</p> <p><b>Question 1b:</b> Do you have your child's red book?</p> <p>Check vaccination status in book. If MMR vaccination recorded as <a href="#">given</a> then no need to isolate. If no evidence of measles/ MMR vaccination, go to question <a href="#">3</a></p>
<p><b>Question 2:</b> Has the GP suspected measles and asked the patient to attend?</p> <p>Action: Have heightened suspicion but still need clinical <a href="#">symptoms</a> . Go to Question 3</p>
<p><b>Question 3:</b> Has the Patient had recent contact with a known, confirmed measles case?</p> <p>Action: If the response is 'yes' have a high clinical suspicion if unvaccinated- go to <b>Question 4</b> (if then has <a href="#">any</a> of the symptoms listed = Isolate)</p> <p><b>If the response is 'no' – go to Questions 4</b></p>
<p><b>Question 4:</b> clinical presentation – screen as below:</p> <p>A. Does the patient have a High <a href="#">temperature</a>, <a href="#">look</a> unwell and is lethargic?</p> <ul style="list-style-type: none"> <li>• <b>PLUS</b> any of the following?                     <ul style="list-style-type: none"> <li>B. Sore red watery eyes</li> <li>C. Cough and/or runny nose</li> <li>D. White spots in the mouth</li> <li>E. Has there been contact with a confirmed or suspected <a href="#">case</a></li> <li>F. Red/Brown Rash that appeared after the above. Starting behind ears or on face then spreading to body</li> </ul> </li> </ul> <p><b>If yes to 'A' PLUS any additional screening (B-F): Isolate and ensure <a href="#">“?measles”</a> on the triage note</b></p>

# Recognise measles

## Staff notice

**NHS**  
University Hospitals Birmingham  
NHS Foundation Trust

Sent on behalf of Infection Prevention and Control

### Measles cases are rising in our area

Dear Colleague

Measles cases are rising in our area, therefore clinicians at this time are asked to have a high suspicion of measles should any patient attend the Emergency Department or access adult or paediatric care, with the following clinical presentations of measles:

#### Prodromal phase, 2 to 4 days before the rash appears:

- High fever.
- Cough.
- Coryza (runny nose).
- Conjunctivitis (pink eye).
- Fever typically increases, to peak around rash onset.
- History to include potential exposure to others with similar symptoms or rashes.



#### Koplik spots:

- Koplik spots are small white/bluish spots inside cheeks/back of the lips.
- They are characteristic of the prodromal phase.
- They may appear 1 to 4 days before the rash, but usually disappear on day 2 of the rash- so may not be present when case presents.



#### Rash

- Usually starts on the face (behind ears, on hairline).
- Spreads to trunk and rest of the body and can become generalised.
- Red/brown spots.
- Flat, with sometimes small, raised bumps on top (maculopapular).
- Spots increase over 2 to 3 days; rash gradually expands.
- Can join together to form blotchy patches, particularly on face and trunk.
- Usually not itchy and no blisters.
- Generally lasts for 3 to 7 days.
- More difficult to spot on darker skin.



Suspected cases should be cohorted or isolated (especially if unvaccinated) on arrival to prevent onward transmission and protect vulnerable contacts.

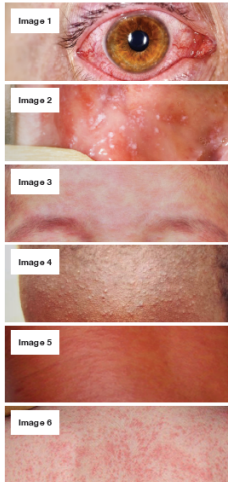
Colleagues are please asked to:

- Report suspected measles cases urgently by phone to your infection prevention and control team or duty virologist out of hours (via switchboard).
- Staff should have documented evidence of 2 doses of the MMR vaccine or have positive antibody tests for measles and rubella.
- Where appropriate, and particularly for individuals who do not engage with primary care, check if they are up to date with their MMR and vaccinate (or signpost to GP) if not.

# Think measles!

Vaccination rates have fallen, and cases of measles are on the rise in the Midlands  
Any patient with fever and a rash is potentially infectious and should be directed to a side room on arrival

Measles is highly infectious so isolate anyone presenting with a rash and fever straight away



- measles starts with a 2 to 4 day "prodromal" phase before the rash appears, with coryza, cough, conjunctivitis and a fever
- fever typically increases, to peak around rash onset
- rash generally starts behind the ears, spreads to the face and then expands onto the trunk and can become generalised. The rash is red, blotchy, maculopapular (not itchy) and lasts around 3 to 7 days
  - the rash is more difficult to spot on dark skin (see images 3, 4 and 5)
  - Koplik spots (Image 2) may appear around the time of the rash and last for 2 to 3 days so can easily be missed. They are small white or bluish/white lesions on the buccal mucosa. They can be confused with other lesions in the mouth and so their suspected presence is an unreliable marker of measles
  - the infectious period spans 8 days i.e. cases are infectious from 4 days before rash onset and for 4 full days after several other common rash illnesses have similar presentations (especially in young children) e.g. roseola, parvovirus infection and scarlet fever, and so identification on clinical features alone may be unreliable

- check for epidemiological factors that increase likelihood of measles:
  - unimmunised status
  - recent exposure to someone with rash/illness
  - recent travel
  - occupation e.g. healthcare worker, nursery worker
- exclude from nursery/educational setting/work/healthcare until full 4 days after onset of rash

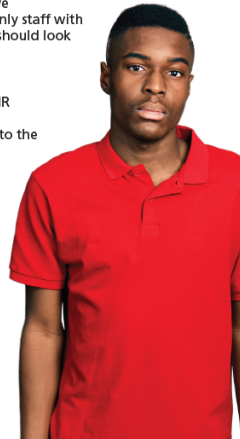
Staff should have documented evidence of two doses of the MMR vaccine or have positive antibody tests for measles and rubella. Only staff with history of measles or two doses of MMR should look after suspected patients.

For suspected patients:

- Ask for history of measles or/and MMR vaccination
- Take a throat swab in VTM and send to the lab asking for measles PCR
- Contact virology on bleep 2821 during working hours or through switchboard for QE and out of hours
- Contact the Infection Prevention & Control Team (via email out of hours)
- AMBER clean after discharge / transfer

Wear the following PPE:

- FFP3 mask for routine care
- Visor
- Gloves/apron



# Think measles

The number of young people catching measles has risen across Europe and the UK.

Children are offered the MMR vaccine to protect against measles, mumps and rubella just after their first birthday and a second dose at 3 years 4 months. It's never too late to be vaccinated even if your child has missed getting doses at these ages.

For the best protection they need both these doses.

For more information contact your local GP surgery or visit: [pha.site/mmr](https://www.nhs.uk/pha/site/mmr)



[Image 1] Conjunctivitis from [www.nhs.uk/conditions/conjunctivitis](http://www.nhs.uk/conditions/conjunctivitis). [Image 2] Koplik spots from [www.nhs.uk/conditions/measles](http://www.nhs.uk/conditions/measles). [Image 3] Measles rash from [www.nhs.uk/conditions/measles](http://www.nhs.uk/conditions/measles). [Image 4] Measles rash on dark skin from [www.afro.who.int/news/who-supports-government-mlgare-measles-rubella-outbreaks-not-overdue](http://www.afro.who.int/news/who-supports-government-mlgare-measles-rubella-outbreaks-not-overdue). [Image 5] Measles rash on dark skin. [Image 6] Measles rash on light skin.  
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# Some other considerations

- Fallow times
  - Consider ventilation (no. of air changes)
  - Limited measles specific evidence
- Immunosuppressed setting
  - BMT and transplant – different presentation
- Breakthrough measles cases



# Sampling

- Getting correct sample
  - PCR throat swab
  - Some patients sent home without appropriate sampling
- Make sure inpatient samples go to correct laboratory
  - Consider TAT
- Access to results for whole region
  - Attendances at multiple EDs/locations
  - Know epidemiological data (no. of swabs, lab confirmed cases etc.)

# Contact tracing

## Text message

*Dear patient, you recently attended hospital in Birmingham and Solihull, and may have come into contact with someone who now has an infection called measles.*

*If you are not vaccinated, have a weak immune system, if you are pregnant, or attended hospital with a child under one year old, please contact your GP or NHS 111 on the phone for advice.*

*Do not be concerned if you have had measles before or if you were vaccinated as a child. Please read the full update on our website for more information: [www.uhb.nhs.uk/measles](http://www.uhb.nhs.uk/measles)*

- >8000 contacts identified to date – hugely time consuming
- Know where patients are located (good record keeping)
- EDs a transmission hub – prevent unnecessary measles admissions

The screenshot shows the NHS University Hospitals Birmingham website. The header includes navigation links: Accessibility, Get in touch, Getting here, Research, Education, Jobs, HR, and Charity. Below the header is the NHS logo and the text 'University Hospitals Birmingham NHS Foundation Trust'. A search bar is visible with the text 'Search UHB'. The main navigation menu includes Home, Patients, Visiting, Services, About us, Get involved, GPs, and News and events. The main content area features a blue banner with the text 'Measles guidance'. Below the banner, there is a paragraph of text: 'This information is intended for people who attended a University Hospitals Birmingham NHS Foundation Trust (UHB) hospital, such as:'. This is followed by a list of hospitals: Good Hope Hospital, Heartlands Hospital, Solihull Hospital, and Queen Elizabeth Hospital Birmingham. Below the list, there is another paragraph: 'The UK Health Security Agency (UKHSA) and Infection Prevention and Control team at UHB, has been informed that a person who attended one of these hospitals, at the same time as you or your child, has measles.' The bottom section of the page is titled 'What is measles?' and contains a paragraph of text: 'Measles is a disease which spreads very easily. People with measles can get a cough, runny nose, rash and fever. Measles can be serious, particularly for people whose immune system is not working normally. The best way to prevent measles is through vaccination. You can find more information about measles on the NHS website.'

## What is the risk of catching measles?

Most older children and adults are immune to measles and so are very unlikely to catch it. This is either because they had measles as a child or because they have been vaccinated.

## Who needs medical advice?

### People with a weakened immunity

You should contact your local doctor (GP) straight away if you have weakened immunity (due to illness or medication). The doctor will assess whether you are immune (that is, you have antibodies) to measles. If the exposure was within the past few days, your doctor may be able to organise treatment to prevent you becoming seriously ill.

### Pregnant women

If you are pregnant and not sure of your immunity, please seek your local doctor's (GP) advice.

### Children under one year

If you attended hospital with an infant aged under one year old, please also contact your local doctor (GP) for advice.

Please call your local doctor (GP) first before going to the practice or hospital.

### You are well and not in the groups listed above

If you are well and not in the groups listed above, you don't need to take urgent action. However, if you are unsure if you are protected from measles, check with your local doctor (GP).

# Proactive surveillance

## Leaflet given to all ED attenders (burden on primary care)

### Important information about measles

This information is for people who have recently attended:

- Good Hope Hospital
- Heartlands Hospital
- Queen Elizabeth Hospital Birmingham
- Solihull Hospital

There is an increase in the number of people with measles in Birmingham and Solihull; there is a high possibility that you may come into contact with someone who has measles.

#### What are the symptoms of measles?

Measles is a highly infectious disease, that spreads very easily.

Measles usually starts with cold-like symptoms, followed by a rash a few days later. Some people may also get small spots in their mouth.

#### The first symptoms of measles include:

- a high temperature
- a runny or blocked nose
- sneezing
- a cough
- red, sore, watery eyes

#### Spots in the mouth

Small white spots may appear inside the cheeks and on the back of the lips a few days later. These spots usually last a few days.

#### The measles rash

A rash usually appears a few days after the cold-like symptoms.

The rash starts on the face and behind the ears before spreading to the rest of the body.

The spots of the measles rash are sometimes raised and join together to form blotchy patches. They are not usually itchy.

The rash looks brown or red on white skin. It may be harder to see on brown and black skin.

For more information about that the measles rash looks like, please visit:  
[www.nhs.uk/conditions/measles](http://www.nhs.uk/conditions/measles)

#### What are the risks of catching measles?

Measles can be serious, particularly for people whose immune system is not working normally.

If you have had two vaccinations for measles - or had measles as a child - then the risk of catching measles is very low, but it is important to check this to protect yourselves and family members who may be more vulnerable.

Measles can lead to serious problems if it spreads to other parts of the body, such as the lungs or brain.

#### Problems that can be caused by measles include:

- pneumonia
- meningitis
- blindness
- seizures (fits)

These problems are rare, but some people are more at risk. This includes babies and people with weakened immune systems.

The best way to prevent measles is by having two doses of the MMR vaccination.

#### What action should I now take?

If you are not vaccinated, or are not sure if you are vaccinated, it is strongly recommended that you contact your local doctor (GP) and arrange to have the MMR vaccine.

The MMR vaccine is a safe and effective combined vaccine.

Two doses of the MMR vaccine provide the best protection against measles, mumps and rubella. Getting vaccinated is important, as measles, mumps and rubella are serious viral illnesses that can have life-altering consequences. Such as hearing loss and meningitis.

If it is important to you that you, or your child, have an immunisation without pork, then you can request the Priorix vaccine when you speak to your GP surgery.

It is important for you, your child, and your community that you are protected against measles, mumps and rubella.

#### Who needs to get medical advice?

##### People with weakened immunity

You should contact your local doctor (GP) or NHS 111 straight away if you have weakened immunity (due to illness or medication). The doctor will assess whether you are immune (you have antibodies) to measles. If the contact with someone who has measles was within the past few days, your doctor may be able to organise treatment to prevent you becoming seriously ill. They will discuss this with you.

##### Pregnant women

If you are pregnant and not sure if you have been fully vaccinated against measles, please contact your local doctor (GP), midwife or NHS 111, as soon as possible.

If you get measles when you're pregnant, it could harm your baby.

##### It can cause:

- miscarriage or stillbirth
- premature birth (before the 37th week of pregnancy)
- your baby to have a low birthweight

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email [communications@uhb.nhs.uk](mailto:communications@uhb.nhs.uk)

It is important to get urgent medical advice - from your GP, midwife or NHS 111 - if you are pregnant and have been in close contact with someone who has measles.

##### Children under one year old

If you attended hospital with a child aged under one year old, please also contact your local doctor (GP) or NHS 111 for advice.

Please call your local doctor (GP) first before going to the GP surgery or hospital, especially if you or your child are showing any symptoms of measles.

##### You are well and not in the groups listed above

If you are well and not in the groups listed above, you don't need to take urgent action. However, if you are unsure if you are vaccinated against measles, check with your local doctor (GP).

#### What if I become unwell with measles symptoms?

If you become unwell within three weeks of attending Good Hope, Heartlands or Queen Elizabeth Birmingham hospitals, and think it could be measles (see symptoms on the other page), you should contact your local doctor (GP) or NHS 111.

Tell your local doctor (GP) or NHS 111 that you have attended one of our hospitals and we have advised that it is possible that you may have been in contact with someone who has measles.

Please do not attend your GP surgery, emergency department or any NHS service in person, without calling to seek advice first. This is so they can make sure you do not pass it onto others in the waiting room.

You can find more information about measles and the MMR vaccination on the NHS website:  
[www.nhs.uk/conditions/measles](http://www.nhs.uk/conditions/measles)

# Staff immunity status

- Asked managers to review staff vaccination records to avoid unnecessary staff absences
- Challenges
  - ~25k staff – incomplete measles vaccination records & work locations
  - Vaccine hesitancy
  - Staff access to own records
- Due to volume of exposure incidents vaccination status of EDs now known – reactive
- Targeting staff groups of high-risk patients (haematology and solid organ transplant) – proactive
- Longer term – OH confirm status of all new starters



Sent on behalf of Infection Prevention and Control and Occupational Health

#### MMR vaccination for healthcare workers:

Healthcare workers should have documented evidence of two doses of the MMR [vaccine](#), or have positive antibody tests for measles and rubella.

Unvaccinated healthcare workers are at high risk of measles; occupational health is offering MMR vaccinations to all unvaccinated or partially vaccinated colleagues.

Please book your appointment via phone or email: <http://uhbhome/contact-occupational-health.htm>

You can also request the MMR vaccination from your GP. If you have any concerns or questions about vaccination, then please speak to occupational health.

**\*\* Action required: Please complete the [risk assessment form](#) and also share with colleagues in your teams/departments \*\***

Dear colleagues

As you are aware, there is an increase in the number of people with measles in Birmingham and Solihull; there is a high possibility that you may come into contact with someone who has measles whilst at work.

Measles is a highly infectious disease, that spreads very easily and can be serious, particularly for people who have a weakened immune system.

If you are immune through two doses of vaccination for measles (MMR), or have a positive antibody test, then your **risk** of catching and transmitting measles is very low. It is important to check this, to protect your patients, yourself and your family members who may be more vulnerable.

We would like colleagues to [complete this form](#), to help us to understand how best we can support you and our patients during any measles outbreaks.

The information will be treated in strictest confidence by the [Occupational Health Team](#).

MMR vaccination can be arranged through [occupational health](#) or your GP.

For more information, advice or support, please [Contact Occupational Health](#)

Many thanks for your support and cooperation.

# Example - Staff OH risk assessment

## University Hospitals Birmingham Occupational Health Risk Assessment - measles

The information provided in this form is confidential and no personal identifiable data will be released without your consent.

Please complete this form to help us to understand if you are fully protected against measles. Measles is a highly infectious disease that spreads very easily and can be a very serious illness for some people. We want to reduce the risk of measles to you, our patients, our colleagues and your loved ones.

\* Required

1. Please confirm that you work for University Hospitals Birmingham

Yes

No

2. First name \*

Mark

3. Surname \*

Garvey

8. Are you protected against measles?

If you answer "no" or "not sure" below, please contact Occupational Health to arrange to have your MMR vaccination.

Yes - I have evidence of a positive antibody test. You are considered to be protected against measles, however, please continue to take infection, prevention control measures when in close contact with measles or suspected measles.

Yes - I have had documented two doses of the MMR vaccination. You are considered to be protected against measles, however, please continue to take infection prevention control measures when in close contact with measles, or suspected measles.

No - I have not had two doses of the MMR (this includes only having one dose of MMR or a single measles vaccination). You are not fully protected therefore at higher risk of catching measles. Please contact Occupational Health to arrange to have your MMR vaccination. Please continue to take infection prevention control measures when in close contact with measles, or suspected measles.

Not sure - I am not sure of my vaccination status and/or measles antibody test - please contact Occupational Health or your GP to arrange to have your MMR vaccination. Please continue to take infection prevention control measures when in close contact with measles, or suspected measles.

9. Are you pregnant?

Yes - you are considered to be at higher risk from measles, so please adhere stringently to infection prevention control advice on personal protection. If you have any concerns, please speak to your line manager.

No

10. Do you have any condition, or are undergoing any treatment, that would cause you to be immunocompromised? e.g. cancer, chemotherapy, immunosuppression treatment or HIV

Yes - you are considered to be at higher risk from measles, so please adhere stringently to infection prevention control advice on personal protection. If you have any concerns, please speak to your line manager.

11. Do you work in a high risk setting whereby you could be exposed to measles? Take Infection, Prevention Control measures when in close contact with measles or suspected measles.

Yes

No

12. Outside of work, do you have any regular close contact with anyone at higher risk of measles e.g. voluntary work with high-risk groups, unvaccinated children?

Yes - Where possible take Infection, Prevention Control measures when in close contact with measles or suspected measles.

No

13. Are you fit tested for FFP3 mask?

Yes

No - Please arrange / discuss this with your manager

14. Can you use an FFP3 mask where required?

Yes

No - Please arrange / discuss this with your manager

# IPC considerations

- Suspected cases should be cohorted or isolated (especially if unvaccinated) on arrival to prevent onward transmission and protect vulnerable contacts
- PPE for suspected/ confirmed cases droplet and airborne precautions
  - FFP3 or respiratory hood for routine care and AGPs
  - Difficult for GPs to do this
- Where appropriate, and particularly for individuals who do not engage with primary care, check if they are up to date with their MMR and vaccinate (or signpost to GP) if not
  - Vaccine hesitancy of local population

# Summary – key points

- Early clinical recognition
- Knowledge of local epidemiology
- Strong communication, leadership and system-wide working
- Vaccination strategy

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**Thank you**

Questions?

