# **Pertussis Update**



June 2024

## **Overview - Current Situation**

1 Rise in Cases

There has been a rise in Pertussis cases in England since 2023.

2 Global Increase

Global activity has been increasing, with large outbreaks in Europe and more recently London and Birmingham

3 MMR Coverage Decline

Vaccination rates in the UK has fallen to the lowest level in a decade and is also dropping amongst pregnant cohort - MECC

4 NHS Commitment

Key priority regarding timely and complete vaccination in pregnancy, infants and children under 10 years

## **Importance for Primary Care**

#### **First Contact**

PERTUSSIS cases are most likely to contact primary care first, therefore staff need to be able to:

Identify suspected cases and notify the Health Protection Team (HPT) promptly

Take appropriate action to **stop onward transmission** without delay
and protect vulnerable contacts

#### **Preventive Setting**

Primary care provides the setting to raise awareness and offer vaccination.



#### **Staff Vaccination**

Protection conferred through natural infection or vaccination is not lifelong.

JCVI has advised that healthcare workers (HCWs) who have not received the vaccine in the last 5 years and have regular contact with pregnant women or young infants are prioritised for occupational vaccination.

However, due to the current limited availability of vaccine, these HCWs have been categorised into 3 priority groups – see next slide

Promotion of vaccination within HCWs between 16 – 32 weeks of gestation.

#### **Staff Vaccination**

**Priority Group 1:** - HCWs with regular contact with severely ill young infants and women in the last month of pregnancy. This includes:

- Clinical staff working with women in the last month of pregnancy (for example midwifery, obstetrics and maternity settings)
- Neonatal and paediatric intensive staff who are likely to have close and or prolonged clinical contact with severely ill young infants.

**Priority Group 2:** - HCWs with regular clinical contact with young unimmunised infants in hospital of community settings. This includes:

- General paediatric staff
- Paediatric cardiology staff
- Paediatric surgery staff
- Health visitor staff

**Priority Group 3: -** HCWs with intermitted clinical contact with young unimmunised infants in the community. This includes HCWs in general practice

Promotion of vaccination within HCWs between 16 – 32 weeks of gestation.



## Prevention

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#### Signage

Place signs in reception areas advising patients with respiratory symptoms to report to staff

#### **Reception Training**

Train receptionists to direct potentially infectious patients to telephone triage

**In-Person Review** 

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If in-person review is needed, ensure patients are placed in an appropriate location e.g. isolation room. If clinically acceptable, suspected cases should attend at end of day to minimise risk of transmission



# **MECC** and Occupational Health

# Make Every Contact Count (MECC)

Check immunisation history, especially children, new registrations, migrants and displaced people

#### **Vaccine**

Ensure timely and complete vaccination in: vaccination in:

- pregnancy
- infants
- children under 10 years

#### **Staff Health**

JCVI has advised that healthcare workers (HCWs) who have been exposed to Pertussis in the last 5 years and have regular contact with pregnant women or young infants are prioritised for occupational vaccination.

However, due to the current limited availability of vaccine, these HCWs have been categorised into 3 priority groups – see slide 4

# **Pertussis: Key Facts**

1 Respiratory Infection

Pertussis can affect individuals of any age.
Young unvaccinated infants are at highest risk of severe complications and death

3 Incubation Period

Incubation period: 7 to 10 days from exposure to onset of symptoms but can range from 5 up to 21 days in some individuals

**2** Transmission

Transmitted through respiratory route or direct contact with secretions

4 Infectious Period

Infectious period: onset of symptoms until 48hrs of appropriate antibiotic treatment **OR** up to 21 days from onset of symptoms dependent on:

- Antibiotic therapy
- Risk factors
- Risk assessment and discussion with UKHSA/IPM or HP teams.

## **Clinical Presentation: Pertussis**



If someone presents with an acute cough lasting for 14 days or more without an apparent cause plus one or more of the following:

- Paroxysms of coughing
- Post-tussive vomiting
- Inspiratory whoop
- Undiagnosed apnoeic attacks in young infants

#### OR

• Someone with signs and symptoms consistent with pertussis who has been in contact with a confirmed case in the previous 21 days

#### OR

• Someone who is known to be part of any ongoing outbreak investigation in a specific group of people. For example, children attending the same school or nursery where Pertussis in known to be circulating.

## **Risk Assessment of Cases**

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#### **Vaccination Status**

Check vaccination status

#### **Exposure**

Recent exposure to someone with illness

#### **Healthcare Worker**

Is this person a healthcare worker (HCW)

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#### **Vulnerable Contacts**

Any contacts who are identified as vulnerable

## Reporting

**1** Urgent Reporting

Report all suspected cases urgently via phone to your local Health Protection Team (HPT) 0300 303 8162 - Option 2 <a href="mailto:swhpt@ukhsa.gov.uk">swhpt@ukhsa.gov.uk</a>

https://www.gov.uk/health-protection-team

**3** Hospital Referral

Suspected Pertussis cases should only be referred to hospital if clinically indicated. Where admission is planned, contact the local hospital regarding appropriate isolation before admission

2 Testing and Advice

The HPT will conduct a risk assessment, provide advice regards testing and organise transport for urgent specimen collection if required. Advice on public health action and contact tracing will also be provided

4 Exclusion

Exclude confirmed cases from nursery/educational setting/work until 48 hours after starting antibiotics, or 3 weeks after your symptoms started if you've not had antibiotics

## **Testing**

Direct potentially infectious patients to telephone triage and consultation. If in-person review is required, place required, place patients in an appropriate location, such as an isolation room. If clinically acceptable, schedule schedule suspected cases requiring a face-to-face appointment at the end of the day to minimise transmission risks.

#### For telephonically triaged patients:

If a patient is suspected of Pertussis during telephone triage, notify HPT without delay and and advise the patient to isolate. HPT will assess the assess the situation and provide advice regarding regarding testing, which may include self-testing at testing at home or later attendance at the GP surgery.

Health Protection Team (HPT): 0300 303 8162 – Option 2 swhpt@ukhsa.gov.uk

If HPT advises attendance to GP surgery for for testing, follow guidance for 'In-Person Review' >

#### If in-person review is required:

For cases requiring a face-to-face appointment, ensure the use of an isolation isolation room. If appropriate, patients should be seen at the end of the day or clinic clinic session.

If Pertussis is suspected ensure Transmission-Transmission-based precautions, including including the use of fit tested FFP3 masks are masks are initiated.



# Sample Requirements and Handling

The choice of testing method will depend on:

Age of the patient

Duration of symptoms

Less than 2 weeks from cough onset: PCR and culture

Between 2 and 3 weeks from cough onset: PCR and culture and either oral fluid kit (if aged 2 to <17 yrs) or serology

More than 3 weeks from cough onset: Either oral fluid kit (if aged 2 - <17 yrs) or serology

For further detailed information on the appropriate method to choose for confirming suspected cases please refer to the current Public Health Guidelines - Pertussis testing in Primary Care.docx (live.com)

# Storage, Transport and Urgent Testing

Store samples at room temperature.

Transport depends on the severity and urgency of the case. Urgent testing is indicated for vulnerable individuals, such as infants, pregnant individuals, and the immunocompromised, who may require immunoglobulin therapy within a 72hr period.

Urgent samples may also be required to identify vulnerable contacts such as unvaccinated children, healthcare workers, and pregnant individuals who may need to be excluded for extended periods.

HPT will advise on the requirement for urgent testing and will organise a courier for such cases. All non-urgent samples can be transported as per normal to the local lab.



### **Risk Assessment of Contacts**

1 Waiting Room Exposure

If the patient was not isolated and exposed other patients, the HPT staff will assist with risk assessment and advise on actions

**2** Vulnerable Groups

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The most vulnerable groups are infants, pregnant women, and immunosuppressed individuals

**Healthcare Worker Exclusion** 

- HCWs who have been diagnosed with Pertussis (either clinically suspected, epidemiological linked or laboratory confirmed) shul be excluded for either:
  - 48hrs of appropriate antibiotic treatment has been completed OR
  - Up to 21 days from onset of symptoms dependent on:
    - 1. Antibiotic therapy
    - 2. Risk factors
    - 3. Risk assessment and discussion with UKHSA/IPM or HP teams.

For further information see: Pertussis – PHE Guidelines for the Public Health Management of Pertussis Incidents in Healthcare Settings: <a href="Pertussis: guidelines for public health management - GOV.UK">Pertussis: guidelines for public health management - GOV.UK</a>
<a href="Www.gov.uk">(www.gov.uk)</a>

## **Infection Prevention and Control**

1 Standard Infection Control Precautions (SICPs)

SICPs must be always used by all healthcare workers and in all settings. Comprehensive guidance and advice, including PPE, is available in the National Infection Prevention & Control Manual (NIPCM)

**2** Transmission Based Precautions (TBPs)

TBPs must be followed in addition to SICPs when caring for a laboratory-confirmed or suspected case of Pertussis. More information can be found in <a href="NHS England">NHS England</a> » Chapter 2: Transmission based precautions (TBPs) and appendix 11a of the NIPCM

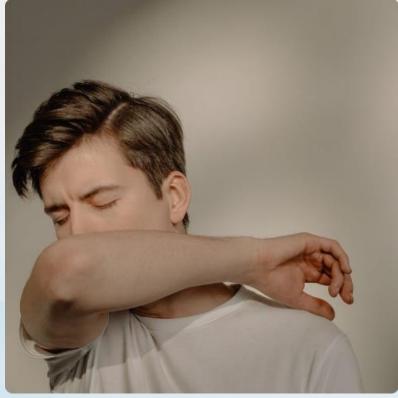
Following suspected/confirmed patient vacation of the care area

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Allow sufficient time for clearance of infectious particles before cleaning. Rooms/areas must be cleaned from highest to lowest points and from least to most contaminated points ensuring local policies are always followed

## **Preventing Transmission**







**Hand Hygiene** 

Proper hand hygiene, including frequent handwashing with soap and water, is essential to prevent the spread of Pertussis

**Cough Etiquette** 

Encourage individuals to cover their mouth and nose with a tissue or their elbow when coughing or sneezing to prevent the spread of droplets

**PPE** 

Healthcare workers should use personal protective equipment (PPE) such as gloves, fit tested FFP3 masks, and gowns when caring for patients with Pertussis

# **Key Actions**

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#### Direct to telephone triage / Isolation

Direct to telephone consultation or cohort/isolate patients presenting with a cough on arrival

#### Reporting

Report suspected cases urgently by phone to your local HPT

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#### MECC

Make Every Contact Count - check immunisation status of every patient and pregnant HCWs

#### **Staff Vaccination**

JCVI has advised that healthcare workers (HCWs) who have not received the vaccine in the last 5 years and have regular contact with pregnant women or young infants and have been exposed to Pertussis are prioritised for occupational vaccination – **refer to slide 4**Promotion of vaccination within HCWs between 16 – 32 weeks of gestation.

#### Resources



Pertussis: guidelines for public health management - GOV.UK (www.gov.uk)

Pertussis: occupational vaccination of healthcare workers - GOV.UK (www.gov.uk)



Pertussis testing in Primary Care

Whooping cough - NHS (www.nhs.uk)

#### **Contacts**

ICB Infection Prevention and Control Team — <u>somicb.infectionpreventioncontrolteam@nhs.net</u>
UKHSA South West Health Protection Team — <u>swhpt@ukhsa.gov.uk</u>