Guidance Objective

To ensure that Healthcare Workers (HCWs) are aware of the actions and precautions necessary to minimise the risk of outbreaks and cross-infection, and the importance of diagnosing patients' clinical conditions promptly.

This guidance applies to all staff employed by NHS Greater Glasgow & Clyde and locum staff on fixed term contracts and volunteer staff.

KEY CHANGES FROM THE PREVIOUS VERSION OF THIS GUIDANCE

Document Control Summary

Approved by and date	Board Infection Control Committee 24th August 2023
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Developed by	Infection Prevention and Control Policy Sub-Group
Related Documents	National IPC Manual NHSGGC Hand Hygiene Guidance National Laundry Guidance NHSGGC SOP Cleaning of Near Patient Equipment NHSGGC SOP Terminal Clean of Ward/Isolation Room NHSGGC SOP Twice Daily Clean of Isolation Rooms
Distribution/ Availability	NHSGGC Infection Prevention and Control web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control
Lead Manager	Director Infection Prevention and Control
Responsible Director	Executive Director of Nursing

Contents

Whooping Cough Aide Memoire

Consult Guidance and isolate in a single room with:

- ✓ ensuite / own commode
- ✓ door closed
- ✓ IPC yellow sign on door
- ✓ dedicated equipment
- ✓ Care checklist completed daily

Patient Assessed Daily

Patient has completed 48 hours of appropriate treatment?

NO

YES

- ✓ Stop isolation
- ✓ undertake terminal clean of room

Guidance - for patients in isolation

Hand Hygiene: Liquid Soap and Water or alcohol based hand rub

PPE: Yellow apron and fluid resistant mask is required for routine care. Disposable gloves must be worn when exposure to blood, body fluids and non-intact skin is anticipated or likely. Eye protection should be worn if risk of blood and body fluid splashing.

Patient Environment: Twice daily chlorine clean

Patient Equipment: Chlorine clean immediately after each use and twice daily

Linen: Treat as infectious

Waste: Dispose of as Clinical / Healthcare waste

Incubation Period: 4 – 21 days

Period of Communicability: until 48 hours of antibiotic treatment has been completed or after 21 days from the onset of symptoms if appropriate antibiotic therapy not received

Notifiable disease: Yes

Transmission route: contact, droplet

1. Responsibilities

Healthcare Workers (HCWs) must:

- Follow this guidance.
- Inform a member of the Infection Prevention and Control Team (IPCT) if this guidance cannot be followed.
- Implement Care Checklist.

Clinicians and Microbiologists must:

- Clinicians must notify NHSGGC Public Health Protection Unit (PHPU) if they diagnose a clinical case of whooping cough.
- Laboratory staff must notify NHSGGC PHPU if they make a laboratory diagnosis of whooping cough.

Managers must:

- Ensure that staff are aware of the contents of this guidance.
- Support HCWs and IPCTs in following this guidance.

Infection Prevention and Control Teams (IPCTs) must:

- Keep this guidance up-to-date.
- Provide education opportunities on this guidance.
- Provide advice during outbreaks and incidents

Occupational Health Service (OHS) must:

- Support the Incident Management Team (IMT) with necessary investigations.
- Provide staff with advice as appropriate.

2. General Information on Whooping Cough

Communicable Disease / Alert Organism	Whooping cough or Pertussis is caused by a gram negative bacillus *Bordetella pertussis*. Symptoms can be worse in this age group. Neither infection nor immunisation provides lifelong immunity.
Clinical condition	Pertussis usually starts with cold-like symptoms sometimes with a mild cough and fever. This characteristically develops into bouts of paroxysmal cough with associated apnoea and cyanosis with vomiting. Infants rarely whoop. The cough can last 2-3 months. Classic infection can last typically 6-10 weeks in children. Severity of disease is closely associated with age. Infants under one year have the highest mortality rate and are more likely to be hospitalised. Infection is generally milder in teenagers and adults.
Mode of spread	Droplet transmission: Close direct contact, (a distance of less than 1m) with an infected person via aerosolised droplets from the respiratory tract.
Incubation period	Usually 6 to 10 days with a range of 4 to 21 days.
Notifiable Disease	Yes. Cases should be notified on clinical suspicion by medical staff to: Public Health Protection Unit during working hours on 0141 201 4917; out of hours via Switchboard. Clinicians should **not** wait for laboratory confirmation before notifying. If suspected, clinicians should seek advice from a paediatric / adult ID physician.
Period of communicability	A case is considered infectious from the onset of symptoms until 48 hours of antibiotic treatment has been completed, or for 21 days from onset of symptoms if they have not received appropriate antibiotic treatment (PHE 2018).
Persons most at risk	Infants under one year old who have not been immunised have the highest mortality rate.

3. Transmission Based Precautions (TBPs) for patients with confirmed or suspected Whooping Cough

Accommodation	Single room until 48 hours of appropriate antibiotic treatment or 21 days from onset of symptoms if appropriate antibiotic treatment has not been completed. TBPs should be implemented (droplet and contact).
Care Checklist	Yes
Clinical/ Healthcare Waste	All non-sharps waste from patients with whooping cough should be designated as clinical / healthcare waste and placed in an orange bag. See NHSGGC Waste Management Policy
Contacts	Please refer to **Appendix 1**. Clinical Team, IPCT and Public Health will be responsible for contact tracing.
Domestic advice	Domestic staff must follow the NHSGGC SOP Twice Daily Clean of Isolation Room Cleans should be undertaken at least four hours apart.
Equipment	Where practicable, the patient should be designated their own equipment. See NHSGGC Decontamination Guidance
Exposures	Prevent further cases by isolating all patients suspected or diagnosed with whooping cough in a single room and apply TBPs (droplet and contact). Confirmed and suspected cases should not be cohorted together.
Hand hygiene	Hand hygiene is the single most important measure to prevent cross-infection. Hands must be decontaminated before and after each direct patient contact, after contact with the environment, after exposure to body fluids and before any aseptic tasks. Patients should be encouraged to carry out thorough hand hygiene. Please refer to NHSGGC Hand Hygiene Guidance
Last offices	See National Guidance for Last Offices
Linen	Treat used linen as infectious, i.e. place in a water soluble bag then into a clear plastic bag (place water soluble bag in the brown plastic bags used in Mental Health areas), tied then into a red laundry hamper bag.

	Please refer to National Guidance on the safe management of linen
Moving between wards, hospitals and departments (including theatres)	Only if clinically indicated patients can be transferred between units and departments. Inform the receiving ward/department before transfer, of the need for transmission based precautions. Staff transferring the patient should wear a FRSM during the transfer and should decontaminate their hands by washing with liquid soap and water or with use of alcohol hand gel once transfer is complete. Inform IPCT.
Notice for the door	The yellow IPC isolation sign must be placed on the door to the patient's room. The door should remain closed and if the door cannot be closed, then an IPCT risk assessment should be completed and reviewed daily.
Patient clothing	**Home Laundering** If relatives or carers wish to take personal clothing home, staff must place clothing into a domestic water soluble bag then into a patient clothing bag and ensure that a Washing Clothes at Home Leaflet is issued. **NB** it should be recorded in the nursing notes that both advice and the information leaflet has been issued.
Personal Protective Equipment (PPE)	A FRSM and yellow apron should be worn for direct care of the patient or within their immediate environment. Disposable gloves must be worn when exposure to blood, body fluids and non-intact skin is anticipated or likely. Eye protection should be worn if risk of blood and body fluid splashing. Whilst the patient is considered infectious, staff carrying out aerosol generating procedures, must wear an FFP3 respirator and eye protection. Perform hand hygiene before donning and after doffing PPE.
Precautions required until	A case is considered infectious from the onset of symptoms until 48 hours of antibiotic treatment has been completed or for 21 days from onset of symptoms if they have not received appropriate antibiotic treatment (PHE 2018).
Specimen required	A nasopharyngeal/nasal swab should be taken to confirm whooping cough.
Terminal Clean of Room	As per SOP Terminal Clean of Ward/Isolation Room

Visitors	Visitors are not required to wear aprons and gloves, unless they are participating in patient care. They should be advised to decontaminate their hands when entering/leaving the room/ patient.

4. Evidence Base

PHE (2018) Guidelines for the Public Health Management of Pertussis
https://www.gov.uk/government/publications/pertussis-guidelines-for-public-health-management

PHE (2016) Public health management of pertussis in healthcare settings
https://www.gov.uk/government/publications/pertussis-guidelines-for-public-health-management-in-a-healthcare-setting

Centers for Disease Control. Guideline for Isolation Precautions: Preventing transmission of Infectious Agents in Healthcare Settings 2007.
www.cdc.gov/infection-control/media/pdfs/guideline-isolation-h.pdf

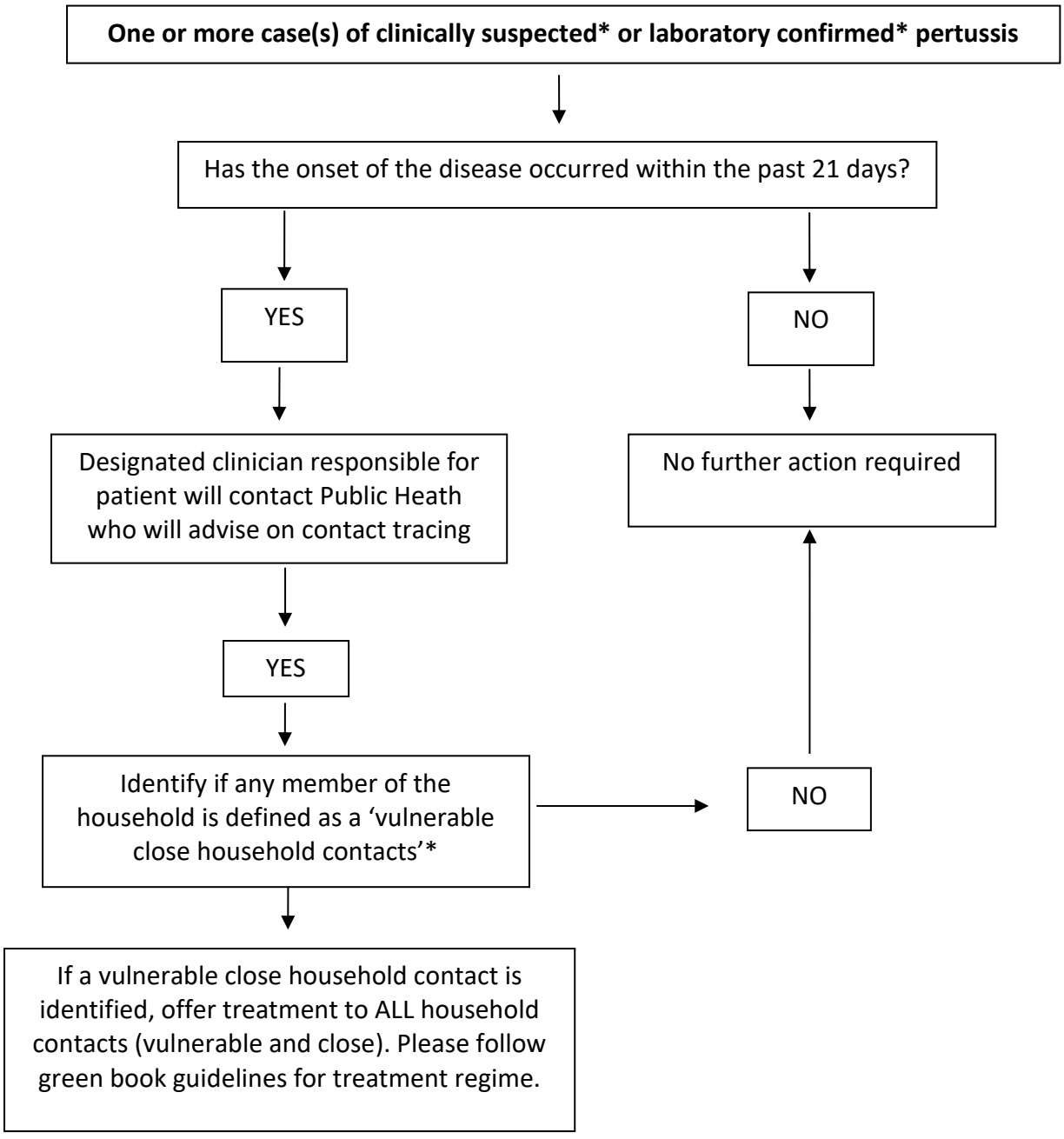
NHSGGC Antibiotic Policies (Clinical Information / Clinical Guidelines / Clinical Topic / Infections & Microbiology) https://clinicalguidelines.nhsggc.org.uk/

Immunisation against infectious disease 'The Green Book'
https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book

HPS (2018) National Infection Prevention & Control Manual
http://www.nipcm.hps.scot.nhs.uk/
ARHAI (2022) National Infection Prevention and Control Manual

Appendix 1 - Management of contacts

Management of contacts of a clinically suspected or laboratory confirmed case of pertussis (presumption that the initial case has been commenced on treatment)



*__Definitions__:

Suspect case:
An acute cough lasting 14 days (with at least one of the following symptoms: post tussive vomiting, apnoea or whoop), or a paroxysmal cough lasting 7 days.

Confirmed case:
A symptomatic case with positive laboratory result by culture, PCR or serology where available.

'Close household contacts':
Person living within the same household or with an overnight stay in institutional setting (e.g. ward, residential home).

'Vulnerable close household contact' includes:

- Newborn infants born to symptomatic mothers.
- Infants under one year who have received less than three doses of DTaP/IPV/Hib.
- Unimmunised and partially immunised infants or children up to ten years.
- Women >32 weeks pregnant.
- Adults who work in a healthcare, social care or childcare facility.
- Immunocompromised individuals (as defined in the Green Book).
- Individuals with other chronic illnesses, e.g. asthma, congenital heart disease.