Infection Prevention and Control Measures for SARS-CoV-2 (COVID-19) in Health and Care Settings - WALES.

Acknowledgements:
Amended for use in Wales from original document prepared by NHSE & I IPC team May 2022.

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1. Introduction

This guidance is intended to provide disease specific infection prevention and control measures to prevent transmission of SARS-CoV-2 in health and care settings in Wales. This guidance should be read in conjunction with the National Infection Prevention and Control Manual Wales, which describes the application of Standard Infection Prevention and Control Precautions (SICPs) and Transmission Based Precautions (TBPs).

All healthcare staff must be familiar with the principles of SICPs and TBPs for preventing the spread of infection in healthcare settings.

The elements of SICPs are:

- *patient placement and assessment for infection risk (screening /triaging/testing)
- hand hygiene
- respiratory and cough hygiene
- Personal Protective Equipment (PPE)
- safe management of the care environment
- safe management of patient care equipment
- safe management of healthcare linen
- safe management of blood and body fluids
- safe disposal of waste (including sharps)
- occupational safety: prevention and exposure management

TBPs are the additional measures to SICPs that may be required when caring for *patients with known / suspected infection or colonisation, these are:

- assessment for infection risk and patient placement
- assessment for infection risk and management of contacts
- safe management of patient care equipment in an isolation/cohort area
- safe management of the care environment
- PPE: including surgical masks, respiratory protective equipment (RPE), eye protection, aprons/gowns etc.
- aerosol generating procedures (AGPs) and associated PPE – see Appendix 2
- care of the deceased

The IPC principles in this document apply to health and care settings in Wales. This includes mental health and learning disabilities, primary care, maternity, and paediatrics as well as the care home sector (this list is not exhaustive).

Please note:

- this guidance is of a general nature. Employers should consider the specific conditions of each individual place of work and comply with all applicable legislation and regulations, including the Health and Safety at Work etc. Act

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2. SARS-CoV-2/COVID-19 General Information

2.1. Infectious period
Individuals with COVID-19 may be infectious from 2-3 days prior to symptom onset and typically up to 10 days following symptom onset. Severely immunocompromised individuals may remain infectious for a longer period of time, even in the absence of symptoms. Refer to section 5.3 duration of precautions, for further information.

2.2. High risk groups/individuals
Individuals who are immunosuppressed or have certain medical conditions may be at higher risk of contracting COVID-19 or at higher risk of serious illness and complications. A clinical risk assessment is required for those individuals considered to be high risk. Further information can be found here - Who is at high risk from coronavirus (COVID-19) - NHS (www.nhs.uk)

Additionally, individuals who are unvaccinated or partially vaccinated are at higher risk of infection and serious illness.

2.3. High risk settings
High risk settings for ongoing transmission of COVID-19 are those that cannot mitigate the risk of transmission through the application of the hierarchy of controls (HoC).

Setting-specific risk assessment tools (acute sector, community / primary care and care home sector) are available to support organisations in applying the HoC - Criteria for completing a local risk assessment (acute inpatient areas)

3. Triaging and Testing for COVID-19

3.1. Triaging/assessment of infection risk
Triaging within all healthcare facilities should be undertaken to enable early recognition of patients with COVID-19 and other respiratory infectious agents. Triage should be undertaken by clinical staff who are trained and competent in the application of clinical case definitions as soon as possible on arrival and used to inform patient placement.

Patients with respiratory infection symptoms should be assessed in a segregated area, ideally a single room, and away from other patients pending their test result.

3.2. Testing
Testing for patients and staff should be performed as per current guidance, see -

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4. Additional Infection Prevention and Control Measures for SARS-CoV-2 in healthcare settings

The application of SICPs and TBPs as per chapters 1 and 2 of the NIPCM for Wales should be followed. Refer to A to Z of pathogens for pathogen specific information and Appendix 11 for guidance on patient placement and the use of RPE for SARS-CoV-2. NIPCM Appendices

Appendix 1 of this guidance describes the personal protective equipment (PPE) required when providing direct care for suspected or confirmed SARS-CoV-2 patients.

As a minimum, contact and droplet precautions should be applied when caring for patients with known or suspected COVID-19. In specific circumstances airborne precautions should also be applied, for example, when performing AGPs, and in high risk settings. Appendix 2 of this guidance has an updated AGP list as published in the NIPCM England from 14th April 2022.

4.1. Source control

Mask wearing is a form of source control that has been applied to staff, patients and visitors in healthcare settings during the pandemic to prevent the transmission of SARS-CoV-2 in health and care settings. The most recent guidance from the World Health Organization (WHO) makes a strong recommendation (based on very low certainty of evidence) that in areas of known or suspected community or cluster SARS-CoV-2 transmission, universal masking is recommended in health care facilities.

Health and care staff

Health and care staff should continue to wear facemasks (type IIR) when working in COVID-19/respiratory care pathways and when clinically caring for suspected/confirmed COVID-19 patients. In all other clinical care areas universal masking should be applied when there is known or suspected cluster transmission of SARS-CoV-2 e.g., during an outbreak, and/or if new SARS-CoV-2 VOC emerge. Universal masking should also be considered in settings where patients are at high risk of infection due to immunosuppression e.g. oncology/haematology. This should be guided by local risk assessment. This includes primary and community care staff.

Facemasks are not required in non-clinical areas e.g. offices, social settings. Where patients are supported in community settings e.g. mental health/learning disabilities

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support in the community, staff are not routinely required to wear masks, similar to public health messaging in these settings, unless this is their personal preference.

Approved transparent face masks are now available to purchase for use in place of an FRSM (type11R) if needed following a risk assessment. Any product must be a NWSSP approved product that meets the national technical standard. They are not intended for routine use and must be worn in accordance with manufacturer instructions for use (IFU).

**Inpatients:**

Non-infectious inpatients are not required to wear a facemask unless this is a personal preference. However, in settings where patients are at high risk of infection due to immunosuppression e.g. oncology/haematology, non-infectious patients may be encouraged to wear a facemask following a local risk assessment.

Inpatients with **suspected or confirmed** COVID-19 should be provided with a facemask (Type II or Type IIR) on admission. This should be worn in multi-bedded bays and communal areas e.g. waiting areas for diagnostics, if this can be tolerated and is deemed safe for the patient.

Facemasks are not required to be worn by **suspected or confirmed** COVID-19 patients in single rooms unless a visitor enters, or the room door is required to remain open. Patients with **suspected or confirmed** COVID-19 transferring to another care area should wear a facemask (if tolerated) to minimise the dispersal of respiratory secretions and reduce environmental contamination. Patients should be provided with a new facemask at least daily or when soiled or damaged.

The requirement for patients to wear a facemask must never compromise their clinical care, such as when oxygen therapy is required or cause distress e.g. paediatric/mental health settings.

**Outpatients/primary care:**

Outpatients with **suspected or confirmed** COVID-19 should wear a facemask/covering, if tolerated, or offered one on arrival.

Non-infectious inpatients are not required to wear a facemask unless this is a personal preference. However, in settings where patients are at high risk of infection due to immunosuppression e.g. oncology/haematology, non-infectious patients may be encouraged to wear a facemask following a local risk assessment.

**Visitors**

Visitors and individuals accompanying patients to appointments are not routinely required to wear a facemask unless this is a personal preference or there is an outbreak in the area being visited. However, in inpatient settings where patients are

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at high risk of infection due to immunosuppression e.g. oncology/haematology, visitors may be asked to wear a facemask following a local risk assessment

4.2. Duration of precautions

TBPs should only be discontinued in consultation with clinicians (including microbiology/IPC team) and should take into consideration the individual’s test results (if available) and resolution of clinical symptoms.

4.2.1. Stepping down COVID-19 precautions if the patient is staying in hospital

For in-patients with COVID-19, precautions/isolation should continue up to 10 days after the onset of symptoms (or their first positive COVID-19 test if they do not have any symptoms), provided the clinical criteria below have been met.

Clinical criteria:

- clinical improvement with at least some respiratory recovery
- absence of fever (temperature greater than 37.8°C) for 48 hours without the use of medication
- no underlying severe immunosuppression

Where available, a locally decided testing protocol can be used to reduce the isolation period down from 10 days in patients who meet the clinical criteria above. These tests can be LFD or other rapid antigen detection tests. Patients should have two negative tests taken 24 hours apart as well as showing clinical improvement as above, before being moved out of isolation.

The residual risk of infection after a negative test on day 6 and 7 is similar to stepping down precautions without testing at day 10. Starting testing earlier than day 6 slightly increases this risk, however organisations may wish to balance this risk against other potential harms to patients.

If either of these test results is positive, the patient should continue their isolation until day 10. The likelihood of a positive test after 10 days of isolation is low. They do not need a further test before stepping down precautions provided they continue to meet the clinical improvement criteria above.

A cough or a loss of, or change in, normal sense of smell or taste (anosmia), may persist in some individuals for several weeks, and are not considered an indication of ongoing infection when other symptoms have resolved.

This guidance does not apply if there are any additional indications for ongoing isolation and transmission based precautions (for example MRSA carriage, *C. difficile* infection, diarrhoea).

For clinically suspected COVID-19 patients who have tested negative and whose condition is severe enough to require hospitalisation, the isolation period should be measured from the day of admission.

For clinically suspected COVID-19 in-patients who have tested negative, the isolation period should be measured from symptom onset or date of a positive test!

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4.2.2. Severely immunocompromised patients
It is possible for severely immunocompromised patients to remain infectious for prolonged periods, even if they do not display any symptoms of COVID-19. The isolation period for these patients whilst in hospital should be at least 14 days.

In severely immunocompromised patients resolution of symptoms should not be used as a marker of decreased infectiousness and these patients should be isolated in side rooms, cubicles or cohorted until they return a negative PCR test. Staff must adhere to recommended IPC measures throughout the inpatient stay.

Severely immunocompromised patients can end their isolation after a single negative PCR test result taken no earlier than 14 days after the onset of symptoms (or their first positive COVID-19 test if they do not have any symptoms).

4.2.3. Outpatients/primary care
Patients who are known or suspected to be positive with a respiratory pathogen including COVID-19 and whose treatment cannot be deferred should receive care from services who are able to operate in a way which minimises the risk of spread of the virus to other patients. If required advice can be sought from Health Board IPC Teams or Health Protection Teams.

Outpatient/primary care settings should determine if TBPs precautions are required following the patient’s recovery from COVID-19 or clinical presentation or if treatment is urgent.

To support primary care specific risk assessment, tools are available to support organisations in applying the HoC here: **Criteria for completing a local risk assessment (primary care and outpatient settings)**

4.2.4. Care home or other non-acute healthcare settings


To support setting specific risk assessment tools are available to support organisations in applying the HoC here: **Criteria for completing a local risk assessment (social care)**

5. Surveillance and monitoring/outbreak management/reporting

Ongoing surveillance of SARS-CoV-2 should continue within healthcare settings and for hospital/organisation onset cases (staff and patients/individuals) must continue.

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Positive cases of COVID-19 identified after admission who fit the criteria for a healthcare associated infection (HCAI) should trigger a case investigation. If two or more cases are linked in time and place, an outbreak investigation should be undertaken.

SARS-CoV-2/COVID-19 is a notifiable organism/disease. Further information on reporting can be found here - List of notifiable diseases (phw.nhs.uk)

6. IPC considerations for contacts of cases (inpatients)
Inpatients who are considered contacts of SARS-CoV-2 cases (not part of an outbreak) are no longer required to isolate if they are asymptomatic. Asymptomatic testing of inpatients may be used to monitor contacts and mitigate risks if the patient remains in hospital or other care setting e.g. LFD or rapid antigen testing.

If symptoms occur contacts should be tested as per testing framework and isolated or cohorted with other symptomatic contacts of same SARS-CoV-2 case.

Refer to Welsh Government COVID-19 Hospital Testing Framework

7. Occupational health, vaccination and IPC considerations for contacts of cases (staff)
Systems should remain in place to ensure that vaccination and testing policies are implemented as advised by occupational health/public health teams.

The vaccination status of staff may be considered when making staffing decisions for areas where suspected or confirmed COVID-19 patients/individuals are cared for.

A risk assessment is required for health and care staff who may be at high risk of complications from COVID-19.

All staff should be vigilant for any signs of respiratory infection and should not come to work if they have respiratory symptoms. They should seek advice from their IPC teams/occupational health department/GP or employer as per the local policy.

If symptoms develop they should absent themselves from work and where possible test for SARS CoV-2 and other viruses. Symptomatic staff who have a negative test should refrain from work until the symptoms have resolved and / or SARS CoV-2 or other significant infection excluded.

Symptomatic staff should avoid contact with people both in the healthcare setting and in the general community. Bank, agency, and locum staff should follow the same deployment advice as permanent staff.

NHS patient-facing healthcare and care home staff should follow Welsh Government testing policy regarding asymptomatic COVID LFD testing. Staff who are a close contact of a case of COVID-19 may continue to work as normal provided they remain asymptomatic.

Refer to Welsh Government COVID-19 Hospital Testing Framework

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Appendix 1: Personal Protective Equipment required while providing direct care for patients with suspected or confirmed COVID-19

Before undertaking any procedure, staff should assess any likely blood and body fluid exposure risk and ensure PPE is worn that provides adequate protection against the risks associated with the procedure or task being undertaken.

If there is no direct contact with the patient or their environment, gloves and aprons/gowns are not required.

Refer to guidance on donning (putting on) and doffing (removing) PPE in appendix 6 of NIPCM Wales.

<table>
<thead>
<tr>
<th>PPE required by transmission/exposure</th>
<th>Disposable gloves</th>
<th>Disposable/reusable fluid-resistant apron/gown</th>
<th>FRSM/RPE</th>
<th>Eye/face protection (goggle/visor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Droplet PPE</td>
<td>Single use</td>
<td>Single use apron or fluid-resistant gown if risk of extensive spraying/splashing</td>
<td>Single use FRSM Type IIR for direct patient care (1)</td>
<td>Single use or reusable (1)</td>
</tr>
<tr>
<td>Airborne PPE (When undertaking or if AGPs are likely) (3) Or if an unacceptable risk of transmission remains following application of the hierarchy of controls (4)</td>
<td>Single use</td>
<td>Single use fluid-resistant gown</td>
<td>Single use FFP3 (2) or reusable respirator/powered respirator hood (RPE)</td>
<td>Single use or reusable (2)</td>
</tr>
</tbody>
</table>

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(1) FRSM can be worn sessionally (includes eye/face protection) if providing care for cohorted patients. All other items of PPE (gloves/gown) must be changed between patients and/or after completing a procedure or task.

(2) RPE can be worn sessionally (includes eye/face protection) in high risk areas where AGPs are undertaken for cohorted patients (see footnote 4). All other items of PPE (gloves/gown) must be changed between patients and/or after completing a procedure or task.

(3) Consideration may need to be given to the application of airborne precautions where the number of cases of respiratory infections requiring AGPs increases and patients cannot be managed in single or isolation rooms.

(4) Where a risk assessment indicates it, RPE should be available to all relevant staff. The risk assessment should include evaluation of the ventilation in the area, operational capacity, and prevalence of infection/new SARS-CoV-2 variants of concern in the local area. The hierarchy of controls can be used to inform the risk assessment. Staff should be provided with training on correct use.

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Appendix 2: Aerosol generating procedures

Aerosol generating procedures (AGPs) are medical procedures that can result in the release of aerosols from the respiratory tract. The criteria for an AGP are a high risk of aerosol generation and increased risk of transmission (from patients with a known or suspected respiratory infection).

The list of medical procedures that are considered to be aerosol generating and associated with an increased risk of respiratory transmission is:

- awake* bronchoscopy (including awake tracheal intubation)
- awake* ear, nose, and throat (ENT) airway procedures that involve respiratory suctioning
- awake* upper gastro-intestinal endoscopy
- dental procedures (using high speed or high frequency devices, for example ultrasonic scalers/high speed drills)
- induction of sputum
- respiratory tract suctioning**
- surgery or post-mortem procedures (like high speed cutting / drilling) likely to produce aerosol from the respiratory tract (upper or lower) or sinuses.
- tracheostomy procedures (insertion or removal).

*Awake including ‘conscious’ sedation (excluding anaesthetised patients with secured airway)

** The available evidence relating to respiratory tract suctioning is associated with ventilation. In line with a precautionary approach, open suctioning of the respiratory tract regardless of association with ventilation has been incorporated into the current (COVID-19) AGP list. It is the consensus view of the UK IPC cell that only open suctioning beyond the oro-pharynx is currently considered an AGP, that is oral/pharyngeal suctioning is not an AGP.