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	<b>CHICKENPOX</b> <b>[VARICELLA ZOSTER VIRUS (VZV)]</b>	Review Date	July 2021
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### SOP Objective

To ensure that patients with chickenpox (Varicella Zoster Virus) are cared for appropriately and actions are taken to minimise the risk of cross-infection.

This SOP 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 SOP

- Changes to PPE to align to NIPCM with regard to FFP3 masks. Paragraph added re assessment of risk when considering need for a fluid resistant surgical mask (FRSM) when providing direct care.

### Document Control Summary

Approved by and date	Board Infection Control Committee 29 <sup>th</sup> July 2019
Date of Publication	26 <sup>th</sup> August 2019
Developed by	Infection Control Policy Sub-Group
Related Documents	National Infection Prevention and Control Manual NHSGGC Occupational Related Illnesses Policy NHSGGC Shingles SOP Nation Infection Control Manual
Distribution/ Availability	NHSGGC Infection Prevention and Control Policy Manual and the Internet <a href="http://www.nhsggc.org.uk/your-health/public-health/infection-prevention-and-control/">www.nhsggc.org.uk/your-health/public-health/infection-prevention-and-control/</a>
Lead Manager	Board Infection Control Manager
Responsible Director	Board Medical Director

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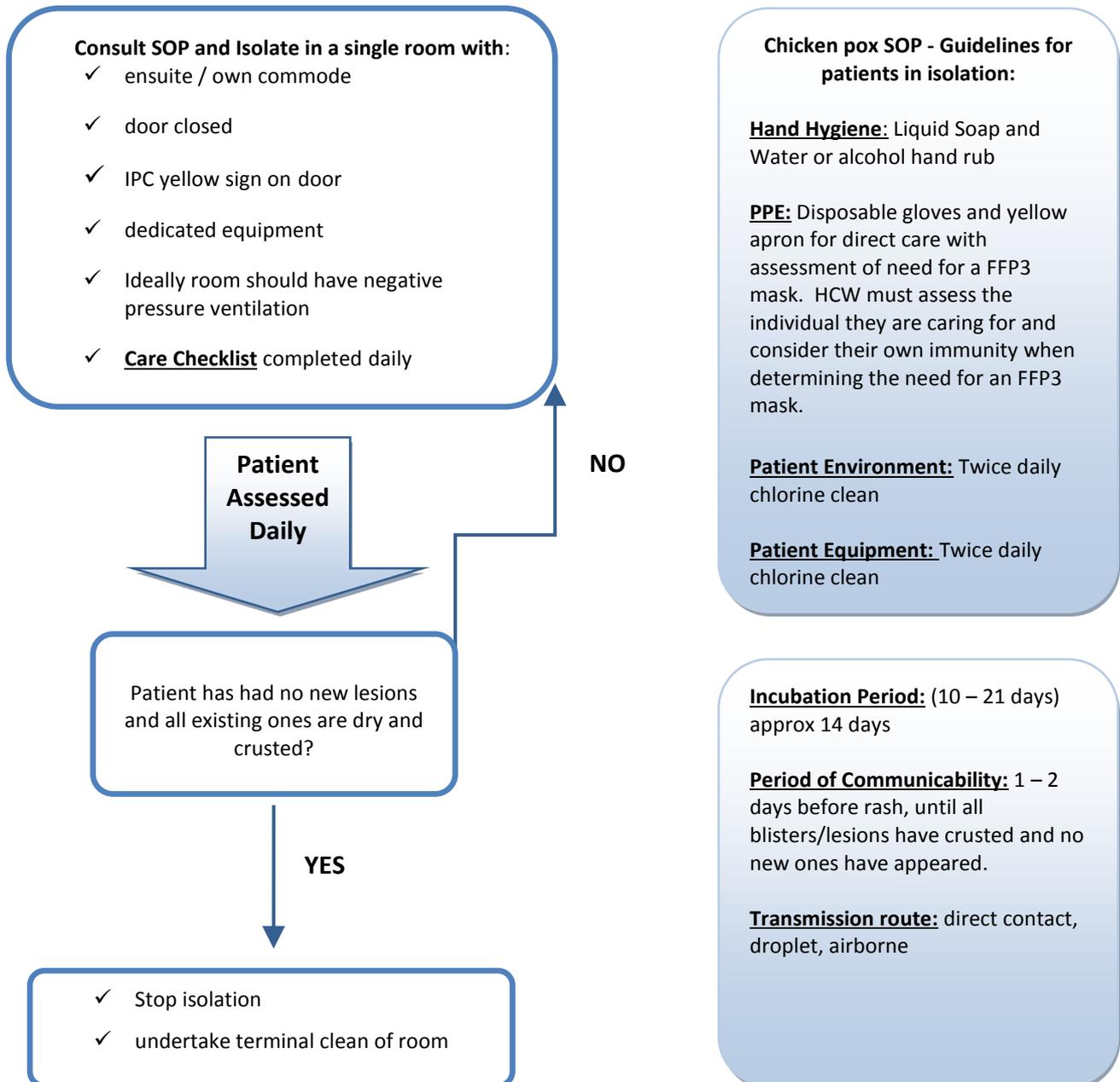
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### Appendix 1: Chickenpox Aide Memoire



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## 1. Responsibilities

### Healthcare Workers (HCWs) must:

- Follow this SOP.
- Inform a member of the Infection Control Team (IPCT) if this SOP cannot be followed.

### Managers must:

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

### IPCTs must:

- Keep this policy up-to-date.
- Provide education opportunities on this SOP.
- Support HCW to undertake a risk assessment if this SOP cannot be followed.

### OHS (Occupational Health Service) must:

- Advise HCW regarding immune status and provision of Chickenpox vaccine
- Advise HCW regarding possible infection exposure and return to work issues as necessary

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## 2. General Information on Chickenpox

<b>Communicable Disease / Alert Organism</b>	Chickenpox - Varicella Zoster Virus (VZV).
<b>Clinical Condition</b>	A generalised viral disease with acute onset of slight fever, and an itchy rash. Blister-like lesions (vesicles) on the body, but more commonly concentrated on the face, scalp and trunk, form a granular scab 3-4 days after they appear. Non-immune adolescents and adults are most at risk from severe disease. <b>Complications can include secondary bacterial infection in previously healthy individuals.</b> Non-immune pregnant women with VZV may develop life-threatening pneumonitis. It is life-threatening in immunocompromised persons due to dissemination. Babies born to mothers with chickenpox within 4-7 days either side of birth are at enhanced risk of serious disease.
<b>Mode of Spread</b>	Direct contact, droplet or airborne.
<b>Incubation period</b>	It takes 2 weeks (10-21 days) after exposure to a person with chicken pox for a person to develop chicken pox. This may be shortened in the immunocompromised. It may be prolonged up to 28 days in those on regular IVIG or given VZIG.
<b>Notifiable disease</b>	Notifiable by diagnostic laboratory.
<b>Period of Communicability</b>	A person with chickenpox can spread the disease from 1 to 2 days before they get the rash until all their chickenpox blisters have formed scabs (usually 5-7 days).
<b>Persons most at risk</b>	This virus can cause serious disease in the foetus in the first 20 weeks of pregnancy. Neonates whose mothers are not immune to VZV or who develop varicella around the time of delivery, patients with leukaemia, cancer patients, transplant patients, immunosuppressed patients, patients on steroids and non-immune pregnant women may suffer severe, prolonged or fatal chickenpox.
<b>Evidence of Immunity</b>	A history of chickenpox is considered adequate evidence of immunity. Approximately 95% of adults are immune and infection usually results in life-long immunity.
<b>High-Risk environment</b>	Oncology/ Haematology, NICU, ICU, Transplant and Maternity Units.

**\*NB - A vaccine is now available for non-immune HCWs.**

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### 3. Transmission Based Precautions for Patients with Chickenpox in High-Risk Areas

<b>Accommodation (Patient Placement)</b>	Patients who require admission should be admitted into a single side room with en suite, preferably negative pressure. Immunocompromised patients should not be nursed in the same area.	
<b>Clinical / Healthcare Waste</b>	All non-sharps waste should be designated as Healthcare/Clinical Waste (HCW) and placed in an orange clinical waste bag within the room. Please refer to the NHSGCC <a href="#">Waste Management Policy</a> .	
<b>Contacts: Staff/ Patients/ Visitors</b>	<p><b><u>Action to be taken following exposure:</u></b></p> Identify staff and patients who are deemed ‘significant exposure’. The following should be used as a guide to the type of exposure, other than maternal/ neonatal and continuous home contact. ‘Significant exposure’ is defined as ‘exposure to someone who has no history of varicella or serological evidence of immunity’.	<ol style="list-style-type: none"> <li>a) Contact in the same room (e.g. in a house, a classroom or a 2-4 bed hospital bay) for a significant period of time (15 minutes or more).</li> <li>b) Face-to-face contact, e.g. while having a conversation for more than 5 minutes.</li> <li>c) In the same 2-4 bed bay or adjacent beds in a large ward.</li> <li>d) Face-to-face indoor play.</li> </ol> <p>Patients should be isolated in a single room within 10 days of first exposure or discharged home. Isolation should continue until day 21 after last exposure.</p> <p>Consult an ID Physician, Virologist or Microbiologist for advice regarding the administration of post-exposure prophylaxis. Please also refer to the <a href="#">Varicella Chapter in Immunisation Against Infectious Disease ‘Green Book’</a> and the <a href="#">Immunoglobulin Handbook</a>.</p>
<b>Domestic Advice</b>	Domestic staff must follow the NHSGGC SOP for <a href="#">Twice Daily Clean of Isolation Rooms</a> . Cleans should be undertaken at least four hours apart.	

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<b>Equipment</b>	<p>Where practical, allocate individual equipment, e.g. own washbowl, commode, moving sling or slip sheet. Equipment must be decontaminated as per</p> <p>See <a href="#">NHSGGC SOP Cleaning of Near Patient Healthcare Equipment</a></p>
<b>Hand Hygiene</b>	<p>Hand hygiene is the single most important measure to prevent cross-infection with Chickenpox.</p> <p>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.</p> <p>Please refer to <a href="#">NHSGGC Hand Hygiene SOP</a></p>
<b>Last Offices</b>	See <a href="#">National guidance for Last Offices</a> .
<b>Linen</b>	<p>Treat used linen as soiled/ infected, i.e. place in a water soluble alginate bag then a clear bag tied and then into a laundry bag. (Brown polythene bag used in Mental Health areas)</p> <p>Please refer to <a href="#">National Guidance on the safe management of linen</a>.</p>
<b>Moving between wards, hospitals and departments (including theatres)</b>	<p>Patient movement should be kept to a minimum unless clinically essential. Prior to transfer, HCWs from the ward where the patient is located must inform the receiving ward, theatre or department of the patient's infectious condition.</p> <p>When patients need to attend other departments the receiving area should put in place arrangements to minimise contact with other patients and arrange for additional domestic cleaning if required.</p>
<b>Notice for Door</b>	Yes.
<b>Precautions required until</b>	There are no fresh crops and all lesions are dry and crusted.
<b>Personal Protective Equipment (PPE)</b>	<p>Gloves and a yellow apron should be used for all direct patient care and contact with patient's immediate environment. (Contact in this context would mean, direct contact with the patient, their equipment or the environment in which they are nursed). An FFP3 mask is recommended in the NIPCM for all care of a patient with chicken pox. HCW must assess the individual they are caring for and consider their own immunity when determining the need for an FFP3 mask. When</p>

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	worn, the mask must not be removed until the HCW has left the room, discarded into the nearest clinical waste bin and hand hygiene undertaken.
<b>Staff</b>	Staff who do not know /do not have immunity to chickenpox should not care for patients with chickenpox. Pregnant staff who have been exposed to Chickenpox should contact their midwife for advice. Please refer also to the NHS GGC Occupational Related Illness SOP.
<b>Specimens Required</b>	On advice of clinicians. Send swabs of lesions in viral transport medium – not charcoal, to virology. A blood sample is required when screening for immunity.
<b>Terminal Cleaning of Room</b>	Follow NHSGGC SOP for <a href="#">Terminal Clean of Isolation Rooms</a> .
<b>Visitors</b>	Visitors should not be allowed to visit a patient with chicken pox during the infectious period.

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#### 4. Recommendation for Varicella Immunisation for HCWs

***Please refer to the Varicella Chapter in Immunisation Against Infectious Disease 'green book' the link below will direct you to this publication.***

[Immunisation against infectious disease - GOV.UK](http://www.gov.uk/government/publications/immunisation-against-infectious-disease)

***Extract from SEHD/CMO(2004)2 Varicella Immunisation for HCWs***

The recommendation covers non-immune HCWs who work in primary care and in hospitals who have direct patient contact. Those having direct patient contact include ambulance drivers, cleaners on wards, catering staff, receptionists as well as medical, nursing, dental and other professional staff, whether employed directly or through a sub-contract.

HCWs with a definite history of chickenpox or herpes zoster can be considered already immune. Those with a negative or uncertain history of chickenpox or herpes zoster should be serologically tested and vaccine offered only to those without varicella zoster antibody.

Non-immune HCWs should receive two doses of live attenuated varicella vaccine 4-8 weeks apart. Routine post-vaccination serological testing is not advised.

Varicella vaccine is contraindicated in pregnancy and pregnancy should be avoided for 3 months following vaccination.

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## 5. Evidence Base

Centre for Disease Control. Prevention of Varicella. Recommendations of an Advisory Committee of Immunisation practices. MMWR. 2007;56:1-40.

<https://www.cdc.gov/chickenpox/about/transmission.html>

Immunisation against infectious disease 'Green Book' Department of Health.

<https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>

HPA Immunoglobulin Handbook, Chapter 7 Chickenpox, 2008

[Immunoglobulin: when to use - GOV.UK](#)

HPS (2019) National Infection Prevention and Control Manual

[National Infection Prevention and Control Manual: Home](#)

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