

VARICELLA ZOSTER (VZ) VIRUS, CHICKENPOX & SHINGLES GUIDANCE

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Please *specify* standard/criterion numbers and tick ✓ other boxes as appropriate

The Strategic Directions 2007-2012 were agreed by the Board of Directors in October 2007 to support the Trust's vision "Respond, Deliver, Enable". The Key Milestones below will ensure there is a shared understanding about what needs to be delivered.

Monitoring Information		Strategic Directions – Key Milestones	
Patient Experience		Waiting	
Assurance Framework		Privacy and Dignity	
Monitor/Finance/Performance		Efficiency and Effectiveness	
Care Quality Commission Outcomes:	8	Delivery of Care Closer to Home	
		Infection Control	✓
NHSLA Risk Management Standards for Acute Trusts			
NHSLA CNST Maternity Clinical Risk Management Standards:			
Other (<i>please specify</i>):			
Note: This policy has been assessed for any equality, diversity or human rights implications			

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1. General Information

Chickenpox (varicella) is a highly infectious disease caused by the varicella zoster (VZ) virus. The incubation period is between 10-21 days. Chickenpox usually confers lifelong immunity, although the virus persists in a latent form in the sensory nerves. Reactivation of the latent varicella virus in later life results in shingles (Herpes zoster). It is not known what causes the virus to reactivate; reactivation can be spontaneous or follow a period of physical illness or stress.

Immunization against varicella is available. It is Trust policy to offer varicella vaccine to all non immune employees working in clinical areas (refer to the Screening and Immunisation Policy).

2. Clinical features

- Chickenpox

Characterised by a blister-like itchy rash, appears initially on the face, scalp and trunk, but can spread over the entire body. Other symptoms which may precede the rash by 48 hours include general malaise, fever and headache.

- Shingles

The virus causes severe pain and itching followed by the development of blister-like lesions, occurring at the site of the affected sensory nerve, typically causing a strip-like pattern on one side of the body.

3. Transmission

- Chickenpox

Chickenpox is transmitted through direct person to person contact, via airborne spread of respiratory droplet nuclei, and vesicle fluid or through contact with infected articles such as clothing and bedding.

- Shingles

Is much less infectious than chickenpox although spread may occur from patients who have extensive lesions and susceptible contacts can develop chickenpox. Transmission can occur through direct contact with exudate from wet lesions or airborne via vesicle fluid in disseminated shingles.

4. Infectious Period

- Chickenpox

The most infectious period is from one to two days before onset of the rash and continues for one week after onset or until all lesions are dry and have crusted. NB immunosuppressed patients may be infective for longer.

- Shingles

For one week following onset of eruption or until lesions are dry. NB period of infectivity may be slightly reduced by aciclovir.

5. Testing

Adults suspected of having chickenpox require a viral swab taken from a wet vesicle.

In children, any lesions that look secondarily infected should also be swabbed for MC&S and necrotising fasciitis considered. Discuss antibiotic treatment with a microbiologist.

6. Infection Control Measures

Patients with chickenpox or shingles must only be attended by staff known to be immune (refer to screening and immunisation policy).

7. Standard Infection Control Precautions

Standard infection control procedures must be used for all patients regardless of perceived or known infection risk factors (refer to standard infection control precautions policy).

8. Isolation

Admission of patients with chickenpox should be avoided where possible. In acute settings, patients with suspected or confirmed chickenpox must be isolated immediately in a single room. If symptoms develop during an inpatient stay, transfer to a single room should occur promptly. Isolation rooms used require en-suite facilities, preferably negative pressure, and doors must be kept closed. If capacity available, admission / transfer of adult patients to Torridge ward (refer to operational policy for infection control and Torridge ward).

Patients with shingles should be nursed in a single room during their infectious period. A single room with negative pressure ventilation is **not** required.

If isolation is inappropriate for the patient's mental health seek advice from the Infection Control Nurses.

9. Hand hygiene

In addition to routine hand hygiene at the point of care, hands should be washed with soap and water after removing personal protective equipment prior to leaving the isolation room. Once outside the isolation room repeat hand hygiene.

10. Personal Protective Equipment

In addition to Standard Infection Control Precautions, the use of gloves and aprons are also required for direct patient contact or cleaning.

11. Relatives / Visitors

Non immune visitors should be advised and excluded from visiting during the infective period.

12. Staff Contacts

Please refer to the Occupational Health Varicella Zoster Virus Policy.

13. Immunocompromised Contacts

Immunocompromised patients with no history of chickenpox should have their immune status checked specifically following possible exposure. If immune status is not known, contact microbiology. Varicella-Zoster immunoglobulin (VZIG), available from Microbiology, should be given to susceptible contacts.

Special groups of patients, especially bone marrow transplant patients, may not be immune, even if they have had previous chickenpox. For advice contact Microbiology.

14. Pregnant Contacts

Patients or staff contacts who are pregnant should be checked for immunity. If susceptibility is confirmed by antibody testing the women should be offered Varicella-Zoster Immunoglobulin (VZIG). This must be given within 10 days of contact. Because of the potential risks to the unborn child, pregnant staff should not care for infectious patients unless their immunity has been confirmed by antibody testing.

15. Maternity Unit/Neonatal Unit

Women with chickenpox must not be admitted to the maternity unit unless there is an overriding obstetric need. The immune status of mothers in close contact should be assessed. Pregnant contacts with a positive history of chickenpox do not require VZIG. Those with a negative history must be tested for VZ antibody before VZIG is given. The outcome in pregnant women is not

adversely affected if administration is delayed up to 10 days after initial contact while a VZ antibody test is undertaken.

In addition to the infection control measures above, if a mother has or develops chickenpox whilst on the Maternity Unit the following measures are also required;

- I. Isolate from other mothers, babies, neonates and those known to be susceptible
- II. If mother develops chickenpox less than 7 days before delivery or up to 7 days after, her baby must be given VZIG – Microbiology hold the stocks
- III. VZIG is also indicated for babies of exposed susceptible mothers

16. Notification

Healthcare staff must report, at the earliest opportunity, patients suspected or infected with varicella zoster virus (chickenpox or shingles), to the Infection Control Team (refer to the infection control policy).

17. References

Department of Health (2006) Immunisation against infectious disease (Green Book) edited by Salisbury D, Ramsay M & Noakes K. (Internet) available from;

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_079917

Health Protection Agency (2009) General Information on Chickenpox (Varicella). (Internet 05/02/09) available from;

http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1195733841291?p=1191942152833

Health Protection Agency (2008) Management of neonates exposure to vesicular (varicella/herpes Zoster). (Internet) available from;

<http://www.hpa.org.uk/webw/HPAweb&Page&HPAwebAutoListName/Page/1229416180932?p=1229416180932>

Guidelines on the management of, and exposure to, rash illness in pregnancy (including relevant antibody screening programmes in pregnancy). PHLS (2002). Internet available from;

http://www.hpa.org.uk/cdph/issues/CDPHVol5/No1/rash_illness_guidelines.pdf