SHINGLES (ZOSTER / HERPES ZOSTER) – CHW

PRACTICE GUIDELINE ©

DOCUMENT SUMMARY/KEY POINTS

- Reactivation of a person's latent (hidden) varicella zoster virus, the virus which causes chickenpox, can result in "shingles", sometimes called "zoster" or "herpes zoster".
- Contact with a person who has shingles may cause chickenpox in a non-immune individual.
- Both **Localised** and **disseminated** shingles may be transmitted by airborne spread or direct contact and result in chickenpox in a susceptible person; however **disseminated** shingles is more contagious.
- Standard and Contact precautions apply for cases of **localised** shingles.
- Standard, Contact and Airborne precautions apply for cases of **disseminated** shingles
- Children with **localised** shingles may be nursed in a single room on any ward except Camperdown, Clancy and Edgar Stephen.
- Children with **disseminated** shingles must be nursed in a 100% exhaust ventilation room on Variety Ward or PICU.
- Non-immune Health Care Workers should not have contact with patients with disseminated shingles.
- Non – immune Health Care Workers who are exposed to shingles must inform Infection Control and be followed-up by Work Health and Safety.
- Health Care Workers who are infected with shingles may be able to continue to work if the lesion can be completely covered. This should be discussed with Infection Control.

Approved by	SCHN Policy, Procedure and Guideline Committee	
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Team Leader	CNC	**Area/Dept:** Infection Control

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CHANGE SUMMARY

- Due for mandatory review - minor changes made throughout the document. Recommend for staff to re-read the entire document.
- Updated terminology

READ ACKNOWLEDGEMENT

- Medical & Nursing staff working in clinical areas are to read and acknowledge they understand the contents of this policy.
- Infection Control staff are to read and acknowledge they understand the contents of this policy.

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Introduction

Aetiology

Following infection with varicella-zoster virus (VZV) which causes chickenpox, the virus remains in the body for life and becomes latent (hidden) in nerves that supply sensation to the skin. Normally the varicella virus remains latent (aided by the body's natural immune system) but if the immune system is weakened, reactivation can occur. Reactivation of the virus can result in "shingles", sometimes called "zoster" or "herpes zoster". It cannot be triggered by contact with someone who has chicken pox.

Clinical Manifestations

The first sign of shingles is usually a tingling feeling or itchiness of the skin, which can occur up to one week before the rash occurs. Grouped vesicular lesions appear in the distribution of one to three sensory dermatomes, usually the forehead and scalp, the chest or abdomen, sometimes accompanied by severe localised pain. Systemic symptoms are usually minimal. After several days, the lesions become fluid-filled blisters which dry out and crust within two weeks. After such time, they no longer contain the virus. A typical case of shingles usually lasts 1-2 weeks. It is rare for children to develop post-herpetic neuralgia, but in adults severe pain may continue for months or years after shingles.

Shingles occasionally becomes disseminated in immunocompromised persons, with lesions appearing outside the primary dermatomes with or without visceral complications.

Mode of Transmission

- Cases of both localised and disseminated shingles are infectious and can be passed on by direct contact, or airborne spread causing chickenpox in people who are not already immune.
- Disseminated shingles is highly infectious and is thus readily transmissible to a susceptible person.

Period of Transmissibility

The period of transmissibility persists until all lesions are crusted, usually 1-2 weeks. Immunocompromised children may remain infectious for longer.

Risk of Acquisition

Shingles generally affects young and/or immunodeficient children, although anyone who has previously had chickenpox can get shingles. Contact with a person with shingles may cause chickenpox (but not shingles) in someone who has never had chickenpox before or has not received the varicella vaccine.

Command and Control

Responsibility for implementation of this policy is the direct responsibility of appropriate clinical line managers caring for affected patients.

- The clinical line Managers will consult with the Infection Control Team regarding appropriate patient placement and infection control procedures.
- Decisions related to isolation and infection precautions for emerging infections are difficult when there is a lack of clinical evidence. Decision making is often pragmatic and may lead to dispute between clinical line Managers and Infection Control / Microbiology
- If there is no policy on a particular issue or the policy needs updating then there needs to be further discussion between clinical line Managers, Infection Control, Microbiology and the Director of Clinical Operations to develop a consensus agreement based on best evidence. If a dispute arises about policy it is to be referred to the Chief Executive (CE) for resolution.
- Shingles is not mandated as a reportable infection to Public Health Units.
- A Reportable Incident Brief (RIB) will be sent to NSW Department of Health on any potential media interests or problems. This is currently the responsibility of the Executive Assistant to the CE.

Infection Control Measures

In a case of localised shingles Standard and Contact precautions apply.

In a case of disseminated shingles Standard, Contact and Airborne precautions apply.

Management

Patients

The Immunocompetent Child

Immunocompetent children with shingles may be nursed on any ward except Camperdown, Clancy and Edgar Stephen in either a single room or cohorted with other children with shingles or chickenpox. Contact precautions apply until vesicles dry out and crust, usually within 1-2 weeks. Lesions should be covered if possible with a hydrocolloid dressing (examples include Comfeel Plus, Duoderm, Granuflex, Ultec, and 3M Tegaderm Hydrocolloid). If lesions cannot be completely covered, additional Airborne precautions apply until all vesicles dry out and crust.

The Immunocompromised Child

Immunocompromised children who have either localised or disseminated shingles and any other child with disseminated shingles must be nursed in a 100% exhaust ventilation room in either PICU or Variety Ward, depending on the severity of their condition. Airborne precautions apply for the duration of the illness. Lesions may be covered if possible with a hydrocolloid dressing.

Exposed Patients

Immunocompromised and non-immune children are at risk of developing chicken pox following exposure to a patient or staff member with active shingles. The risk depends on the immune status of the exposed child and the degree of contact. Refer to the Varicella (Chicken pox) policy for further details on post-exposure prophylaxis and isolation requirements.

Staff

Health Care Workers (especially those who are pregnant) should not have direct contact with children infected with shingles unless they have a positive history of chickenpox, serological evidence of past infection with varicella zoster or documentation of varicella vaccination.

Exposed Staff

Susceptible staff exposed to chickenpox or shingles during the course of their work will be assessed by Work l Health and Safety during the course of the incubation period and excluded from taking care of high-risk patients. Vaccination should be offered. Refer to the Varicella (Chicken pox) policy for further details on post-exposure prophylaxis and isolation requirements.

Infected Staff

Personnel with shingles must inform Infection Control and Work Health, and Safety. These personnel must be excluded from working in NICU/PICU, Clancy Ward, ESW, Camperdown Ward, Clubbe or Turner Day Stay Ward, until all lesions are crusted. Staff can work in the Surgical Ward, Orthopaedic Ward, Commercial Travellers Ward, Hunter Baillie Ward and Wade Ward or in Emergency provided they are not caring for immunosuppressed patients. The shingles lesions must be covered with a hydrocolloid dressing (examples include Comfeel Plus, Duoderm, Granuflex, Ultec, and 3M Tegaderm Hydrocolloid) and staff must adhere to strict hand hygiene. If lesions cannot be adequately covered, staff may be asked not to come to work until lesions have crusted.

Visitors and Siblings

Children with shingles must have their visitors restricted to those who are immune to varicella. Thorough hand washing is required on entering and leaving the room.

Equipment and Environment

- The child's room must be thoroughly cleaned with a neutral detergent after the child has vacated the room (discharge or transfer).
- If the child is relocated, all equipment if possible should be moved with the child to the new location. Equipment should not be shared with other children.
- If equipment has to be used for other children it must be adequately cleaned by wiping over with alcohol impregnated wipes.
- No special handling of linen is required.
- Avoid other children being admitted to the room vacated by a patient with active shingles for at least 30 minutes and ideally 4 hours after the child has vacated the area and the area has been cleaned.

References

1. American Academy of Paediatrics. Varicella Zoster Infections. In: Peter G, ed. *2009 Red Book: Report of the Committee on Infectious Diseases.* 28^{7h} ed. Elk Grove Village, IL: American Academy of Paediatrics; 2009: 714 -727.
2. Australian Commission on Safety and Quality in Healthcare "Australian Guidelines for the Prevention and Control of Infection in Healthcare. Australian Government National Health and Medical Research Council 2010Heymann, D (ed). Chickenpox/Herpes Zoster. *Control of Communicable Diseases Manual*. 19th ed. American Public Health Association, Washington DC; 2008:109-116.
3. National Health & Medical Research Council. Varicella Zoster. *The Australian Immunisation Handbook*. 9th ed. Commonwealth of Australia; 2008:309-321.
4. NSW Health Policy Directive "Occupational assesment, screening and vaccination against specified infectious diseases. 2011_005 (2011) http://www0.health.nsw.gov.au/policies/pd/2011/pdf/PD2011_005.pdf
5. Australian Commission on Safety and Quality in Healthcare "Australian Guidelines for the Prevention and Control of Infection in Healthcare. Australian Government National Health and Medical Research Council : 2012 http://www.safetyandquality.gov.au/wp-content/uploads/2012/10/Standard3_Oct_2012_WEB.pdf

Isolation information

Shingles - Patient / Parent

- Standard and Contact precautions apply for cases of **localised** shingles until all lesions are crusted. Additional Airborne precautions apply if lesions cannot be adequately covered.
- Standard, Contact and Airborne precautions apply for cases of **disseminated** shingles until all lesions are crusted.
- Children with **localised** shingles may be nursed in a single room or cohorted on any ward except Camperdown, Clancy and Edgar Stephen. Children with **disseminated** shingles must be nursed in a 100% exhaust ventilation room in Variety Ward or PICU
- Hands must be washed on entering the child's room.
- On leaving the child's room wash hands with the chlorhexidine hand wash, dry hands thoroughly and then apply 1% chlorhexidine and 70% alcohol hand rub.
- Visitors according to the medical team's discretion.
- Staff with no immunity to varicella must not care for the child.
- The child with shingles cannot use the Starlight Room.
- The child with shingles cannot visit other inpatients.
- The child with localised shingles can attend the schoolroom or dining areas within the hospital if all of the lesions can be completely covered with a hydrocolloid dressing. This must be negotiated with the Infection Control Team.
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Fact sheet for parents/carers

http://kidshealth.schn.health.nsw.gov.au/fact-sheets/chickenpox

For further information please contact Infection Control:

- Page Nos: 6131 / 6550
- Ext 52578 / 52534.

Shingles - Staff

- Standard and Contact precautions apply for cases of **localised** shingles until all lesions are crusted. Additional Airborne precautions apply if lesions cannot be adequately covered.
- Standard, Contact and Airborne precautions apply for cases of **disseminated** shingles until all lesions are crusted.
- Children with **localised** shingles may be nursed in a single room or cohorted on any ward except Camperdown, Clancy and Edgar Stephen. Children with **disseminated** shingles must be nursed in a 100% exhaust ventilation room in Variety Ward or PICU or in a single room in Emergency with the door shut.
- Hands must be washed on entering the child's room.
- On leaving the child's room wash hands with the chlorhexidine hand wash, dry hands thoroughly and then apply 1% chlorhexidine and 70% alcohol hand rub.
- Visitors according to the medical team's discretion.
- Staff with no immunity to varicella must not care for the child.
- The child with shingles cannot use the Starlight Room.
- The child with shingles cannot visit other inpatients.
- The child with localised shingles can attend the schoolroom or dining areas within the hospital if all of the lesions can be completely covered with a hydrocolloid dressing. This must be negotiated with the Infection Control Team.
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- All clinical staff must provide evidence to prove they have protection against varicella.
- Staff who have no immunological protection against varicella should be vaccinated.
- Staff who refuse vaccination must acknowledge this in writing.
- Unprotected staff will be risk managed and must not work in areas where others are put at risk.
- Unprotected staff who are exposed to shingles will be monitored by OHR&S and excluded from work if symptomatic. Exclusion from work will continue until all lesions are crusted.

For further information please contact Infection Control:

- Page Nos: 6131 / 6550
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