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Skin Health Assessment for Children Procedure

1. Purpose

This document guides Population Health staff in the assessment of skin health for children, and for prevention and management of skin infections.

Background

Skin, the largest organ of the body, provides protection for internal organs and the blood stream. Healthy skin is the body's first line of defence against pathogens. Skin conditions and infections are itchy, painful, unsightly and contribute to general poor health. For children, skin conditions and infections can significantly affect sleep, wellbeing and educational outcomes. Recurrent infections can affect growth, ability to concentrate at school and lead to poor, long-term health outcomes.¹ Skin infections affect people of all ages and cultural backgrounds, with the highest proportion found in Aboriginal children.¹

Skin sores (impetigo) are highly prevalent in remote Aboriginal communities affecting 45 percent of children at any one time. The proportion of Aboriginal children living in remote areas who experience impetigo is the highest in the world.² It is estimated that 85 percent of Aboriginal children are treated for impetigo before their first birthday. Scabies is often the precursor of impetigo as the scratching breaks the skins integrity and allows the entry of the bacteria. Scabies is endemic in some remote communities, with up to one-third of children affected.³

There is a significant disparity in the burden of skin infections between communities which are resource-rich and those that are characterised by poverty and poor living conditions.⁴ Primordial causes and social determinants of health, including poor housing, food insecurity, poor sanitation and limited access to clean water are significant risk factors.¹

Skin conditions such as impetigo, scabies, head lice, tinea and ringworm are so common in communities with limited resources they are often perceived as minor or 'normal'. This perception or 'normalisation' of skin conditions is common among community members and health practitioners. Normalisation is a well-recognised barrier to parents and carers seeking timely health care,¹ and when they do attend health services these problems are frequently under-appreciated because there are often other medical conditions to address. Skin conditions are linked to bacterial infection (Group A Streptococcus or GAS infections), which can lead to acute illness, serious disease and death.⁴ The introduction of Group A Streptococcus through a break in the skin from scabies or head lice can result in the development of skin sores which may in turn, lead to acute rheumatic fever and rheumatic heart disease, kidney damage, bone and joint infections and/or sepsis.³

Skin sores and scabies are also linked to bacterial infection caused by *Staphylococcus aureus* including Methicillin-resistant Staphylococcus aureus (MRSA), which can result in abscess, cellulitis, bone and joint infections and/or sepsis.³ In rare cases the bacteria can lead to a life-threatening infection known as invasive Group A Streptococcal disease (iGAS), which is a notifiable disease in WA.⁵

Crusted scabies, an extremely infectious condition, occurs when the host's immune system is compromised and cannot control the infestation, allowing the mites to multiply rapidly. Individuals with crusted scabies readily develop secondary bacterial complications, experience frequent hospitalisations and have lower life expectancy.¹

Impetigo, scabies, head lice and fungal infections (tinea) are often seen by primary health care workers,¹ including those working in community health settings. Early detection and treatment of skin infections are critical to prevention of serious infections and lifethreatening illnesses.

2. Procedure

Step 1. Promotion and prevention

- At every appropriate opportunity, promote key health education messages:
 - Children and adults to wash hands with soap and water before eating, after going to the toilet and before going to bed. Use alcohol-based hand sanitiser if running water is not readily available.
 - Keep skin clean with regular showers.
 - Avoid sharing towels and drinking or eating utensils.
 - o Regularly wash clothes, bed linen and towels (dry in the sun).
 - Cover skin sores and bites with clean dressings.
 - Wash hands after contact with own skin sores or when caring for other's sores.
 - Remind families to keep a clean dressing supply when travelling, camping or attending cultural events.
 - Seek medical help for scabies and sores on the skin.
- Provide positive feedback about what is going well for the family and the health promoting activities or practices they have already adopted.
- Promote adequate supply of fresh water for drinking, washing and cleaning. If not available in community, refer to local government Environmental Health Officer.
 Offer an environmental health referral if concerned about environmental factors that may be contributing to ill-health. A referral triggers the environmental health service to connect with the family and assess their home environment for health hardware function and related issues. For more information visit: Environmental health referrals.

Step 2. Identify child at risk of skin infection

- Consider if there are any child, family and community risk factors:
 - close living and household overcrowding
 - o poor health hardware in homes e.g. plumbing, sewerage, power supply
 - residential location
 - lack of fresh, running water
 - visible sores on child
 - history of skin conditions
 - o child scratching skin or hair.
- Conduct a full skin health assessment if there are any risk factors evident, or if any concerns are raised by parent/carer.

Note: Seek support from an Aboriginal Health Worker when responding to skin health concerns, if possible.

Step 3. Assessment	Additional information
Observe for skin conditions such as eczema, insect bites, fungal infections, minor abrasions, boils, scabies and head lice. For infants (0-12 months): Observe the skin when undertaking the growth assessment. Parent or carer to undress the child. Ask parent/carer if they have noticed any lesions. For older children: Observe all visible skin on the arms, legs, face, neck and scalp. Ask parent/carer or child if they have noticed any lesions. Obtain consent (from parent/carer or mature minor) to undress the individual for further inspection, if required. Consider gender matching for health professional and child.	Skin health assessment is mainly undertaken by visual observation. Clinicians in the Kimberley and Pilbara regions should observe for skin lesions that may indicate Hansen's / Leprosy, such as pigmentation changes and lesions with change in sensation. Refer to: Think Leprosy when If consent cannot be obtained from parent/carer to further inspect a child at school, discuss with the school principal prior to any further action. Pursuant to the Health (Miscellaneous Provisions) Act 1911 (section 337[1]), specified nurses may examine medically and physically, as the nurse deems necessary, any child attending any school. For children under 4 years, use the TEN-4-FACESp tool to support identification of inflicted bruising and possible child abuse.
If the child has scabies, skin sores, boils or fungal infection refer to GP, medical officer, Nurse Practitioner or Remote Area Nurse for treatment.	Impetigo, scabies and crusted scabies are highly infectious and may have serious consequences if not treated promptly.
If evidence of infection of skin or issue, encourage all household members to be checked and treated.	Individuals with crusted scabies may act as core transmitters for further scabies outbreaks in affected communities.
Step 4. Management	Additional information
 Impetigo: Refer for antibiotic treatment, including other family members with skin sores. Avoid use of topical antibiotic creams, as this leads to antibiotic resistance. Sores to be covered by waterproof dressings or crepe bandages. Children to be kept home from school or childcare for 24 hours after oral antibiotic treatment has commenced. 	Impetigo requires prompt medical treatment by GP/ medical practitioner, nurse practitioner or Registered Nurse at Remote Area Nursing Posts authorised as per Structured Administration and Supply Arrangements (SASA). Refer to CEO of Health SASA under 'Registered nurses – remote are nursing services
Scabies: Refer for (or provide as per local process) topical permethrin treatment.	Scabies requires prompt treatment. Everyone who has a clinical diagnosis of scabies requires re-treatment 7 days

 Children to be isolated and kept home from school or childcare for 24 hours after treatment is commenced. Refer all household contacts for treatment regardless of whether they are symptomatic. Organise follow-up check within 48 hours to monitor compliance and need for support. 	after the first application of topical Permethrin. Bed linen, towels and clothing used in previous 5 days to be washed in hot water and detergent. If unable to wash linen, seal items in a plastic bag for least 3 days. Carpeted floors & fabric furniture should be vacuumed.
 Tinea or ringworm: Refer for anti-fungal treatment. Children to be isolated and kept home from school or childcare for 24 hours after anti-fungal treatment is commenced. 	Tinea requires bedlinen, towels and clothing to be washed in hot water. Cats and dogs should be examined and treated for ringworm, as necessary.
Crusted scabies: Refer for urgent medical treatment. Advocate with doctor to notify public health manager, childcare and/or school.	Crusted scabies is highly infectious and very harmful. Effective public health management of individuals with crusted scabies is essential to the community-wide control of scabies. Maintaining a scabies-free environment to prevent re-infection is a high priority.
 Set recalls in CHIS: Follow-up as per needs of child and family. Set appropriate CHIS recalls to allow timely follow-up. 	
Consider offering a referral if concerned about environmental factors that may be contributing to ill-health.	For more information about environmental referrals visit Environmental health referrals

See Appendix A: Skin health assessment pathway for children for an overview of the care pathway.

Useful Resources:

- Telethon Kids Institute Healthy Skin Guideline (2nd Edition, October 2023)
- Telethon Kids Institute <u>Recognising and Treating Skin Infection A visual clinical handbook</u> (3rd Edition, 2018)
- Telethon Kids Institute. <u>Keeping Skin Healthy: A Handbook for Community Care Workers in the Pilbara</u>. Resource for family and community to learn about skin infections, treatment and keeping skin healthy. (January 2019)
- Kimberley Aboriginal Health Planning Forum. <u>Skin Infections in Children, Kimberley Clinical Protocols</u>. (December 2019)
- Menzies School of Health Research <u>Healthy Skin Story</u>. A resource for family and community to learn about skin infections, treatment and keeping skin healthy.

- One Disease an organisation that aims to help eliminate crusted scabies. The website includes resources publications, events and grants programs.
- WA Department of Health Head lice factsheet
- <u>Raising Children Network Dry Skin</u> Information about dry skin, symptoms, prevention and treatment
- Australasian Society of Clinical Immunology and Allergy <u>Eczema Fact Sheet</u>.
- WA Department of Health Invasive group A streptococcal disease (iGAS).
- Public Health Advocacy Institute <u>Environmental Health Trachoma Project</u> information and resources.
- Menzies School of Health Research <u>Acute Rheumatic Fever and Rheumatic Health</u> <u>Disease Guideline 3rd Edition</u> (January 2023)

3. Roles and Responsibilities

Community health staff conducting health assessments for children, including Enhanced Child Health Schedule (ECHS), Children in Care assessments, child and school health assessments or other opportunistic health contacts, are required to:

- complete training MyLearning Child Health: Skin Health Assessment Declaration (CH02 EL2)
- identify children at risk of poor skin health and conduct healthy skin assessments for children at risk of poor skin health, as per scope of practice
- manage skin conditions and infections as described and maintain knowledge of local care pathways for children who require treatment
- observe for signs of child abuse or neglect. Report to line manager and make a report to the Department of Communities, as necessary
- develop and apply cultural capabilities to deliver a culturally safe and responsive service, ensuring the rights, views, values and expectations of Aboriginal people are recognised and respected.

All staff are required to comply with the directions in WACHS policies and procedures as per their roles and responsibilities. Guidelines are the recommended course of action for WACHS and staff are expected to use this information to guide practice. If staff are unsure which policies procedures and guidelines apply to their role or scope of practice, and/or are unsure of the application of directions they should consult their manager in the first instance.

4. Monitoring and Evaluation

Monitoring of compliance with this document is to be carried out by the regional community health and public health managers, using CHIS reports and audits of skin health assessment, referrals and outcomes.

Evaluation of skin assessments for children across WACHS will be conducted annually by a Program Officer, Population Health. Data relating to skin assessments from CHIS will be analysed with input from Rheumatic Heart Disease project staff to assess reach and uptake, in relation to disease prevalence.

5. References

1. Wesfarmers Centre of Vaccines & Infectious Diseases <u>National Healthy Skin Guideline</u> for the Prevention, Treatment and Public Health Control of Impetigo, Scabies, Crusted

- Scabies and Tinea for Indigenous Populations and Communities in Australia (1st edition). 2018.
- 2. McLoughlin F, O'Donnell V, and Bowen AC. Skin health situational analysis to inform skin disease control programs for the Kimberley. The Medical Journal of Australia, 2022; 217(1): 58
- 3. Telethon Kids Institute, 2023. Skin Infections
- May PJ, Tong SY, Steer AC, Currie BJ, Andrews RM, Carapetis JR and Bowen AC. Treatment, prevention and public health management of impetigo, scabies, crusted scabies and fungal skin infections in endemic populations: A systematic review. Tropical Medicine and International Health, 2019;24(3):280-93
- 5. Australian Government Department of Health and Aged Care, <u>Group A streptococcal</u> disease invasive (iGAS). Updated 14 June 2022.
- 6. Kimberley Aboriginal Health Planning Forum. <u>Clinical Protocols and Guidelines</u> Skin Infections. Broome, 2018
- 7. Government of Western Australia, Department of Health, 2023. Control of communicable disease manual, for teachers, childcare workers, local government authorities and health practitioners. Department of Health, Perth, WA

6. Definitions

Term	Definition
Aboriginal	Within Western Australia, the term Aboriginal is used in preference to Aboriginal and Torres Strait Islander, in recognition that Aboriginal people are the original inhabitants of Western Australia.
Abscess	A highly contagious skin infection caused by <i>Staphylococcus aureus</i> bacteria. It starts as a small, pimple like lesion often associated with a hair follicle. It is red, swollen, painful and shiny. Abscesses are also known as boils, furuncles and carbuncles.
Acute rheumatic fever (ARF)	An autoimmune response to untreated Group A Streptococcus which causes an acute, generalised inflammatory illness.
Cellulitis	Cellulitis is a rapidly spreading skin infection caused by Staphylococcus aureus or Streptococcus pyogenes. It is red, painful and spreads quickly from the point of entry towards the centre of the body.
Crusted Scabies	A severe and serious form of scabies usually associated with concurrent chronic disease and immunosuppression. Crusted scabies has a thick crust, scaling appearance and is usually not itchy.
Group A streptococcus, GAS, Strep A	Group A Streptococcus (GAS) is also known as Strep A or Streptococcus pyogenes, is the bacteria which causes impetigo and is linked to morbidity and mortality, e.g. acute rheumatic fever, rheumatic heart disease, sepsis, cellulitis, bone/joint infections and kidney disease,
iGAS	Group A Streptococcus infection in a normally sterile site, such as blood, meninges, articular (joint) spaces, pericardium, peritoneum, pleural cavity, and bone.
Impetigo	A highly contagious skin infection caused by <i>Staphylococcus</i> aureus or <i>Streptococcus pyogenes</i> bacteria. It is also known

	as school sores or skin sores. It starts as a blister that fills with pus, then develops a thick crust overlying it. As skin sores heal, the crust thins and eventually falls off leaving a flat, dry lesion as evidence of the recent infection
Rheumatic heart	Condition of damaged heart valves that may occur following
disease	acute rheumatic fever.
Scabies	Skin infection caused by microscopic mites which burrow into the skin. The mites cause red bumps, burrows or blisters which are very itchy. These often become secondarily infected from scratching and may appear similar to impetigo. Scabies infestations are commonly found between the web spaces of the fingers and toes, around the joints and on male genitalia in adults.
Staphylococcus aureus.	Staphylococcus aureus is the other bacteria which can be
	found in impetigo. It is linked to morbidity and mortality e.g.
	abscess, cellulitis, sepsis and bone/joint infections
Tinea / Ringworm	Fungal infection which may affect almost any area of the skin. It includes Tinea Capitis (scalp infection), kerion (fungal abscess of the scalp) and Tinea Corporis (infection on the body or ringworm). Tinea can also affect the fingernails and toenails.

7. Document Summary

Coverage	All WACHS	
Audience	Population Health staff	
Records Management	Clinical: Health Record Management Policy	
Related Legislation	Public Health Act 2016 (WA) Health (Miscellaneous Provisions) Act 1911 (WA)	
Related Mandatory Policies / Frameworks	 Clinical Services Planning and Programs Framework Public Health Framework 	
Related WACHS Policy Documents	 Enhanced Child Health Schedule Guideline WebPAS Child at Risk Alert Procedure 	
Other Related Documents	 Enhanced Child Health Schedule Practice Guide Guidelines for Protecting Children 2020 DoH Invasive group A streptococcal disease - (iGAS) 	
Related Forms	Nil	
Related Training	 Available from MyLearning: Child Health: Skin Health Assessment Declaration (CH02 EL2) 	
Aboriginal Health Impact Statement Declaration (ISD)	ISD Record ID: 3630	
National Safety and Quality Health Service (NSQHS) Standards	2.10, 5.10	
Aged Care Quality Standards	Nil	
Chief Psychiatrist's	Nil	
Standards for Clinical Care		

8. Document Control

Version	Published date	Current from	Summary of changes
2.00	3 April 2023	3 April 2023	 change of title from 'Child Health' to 'Children' to reflect use with older children if needed (previously 0-5 years). minor changes to document as per new research literature improved emphasis on developing cultural competencies minor changes to reflect operation service deliver
3.00	19 Sept 2024	19 Sept 2024	 inclusion of new resource to align with CAHS and WACHS community health policy documents

9. Approval

Policy Owner	Executive Director Clinical Excellence
Co-approver	Executive Director Nursing & Midwifery
Contact	Senior Policy and Portfolio Officer
Business Unit	Population Health
EDRMS#	ED-CO-20-31346

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Appendix A: Skin health assessment pathway for children

