Northwest Territories Health and Social Services

NWT Clinical Practice Information Notice

Upon receipt, please file this notice in
Section C, Clinical Practice Information Binder for future reference.

The following clinical practice has been approved for use in the Northwest Territories Health and Social Services system, and has been distributed to:

X	Hospitals	X	Community Health Centers	X	Homecare	X	LTCF	X	Lab Directors
X	Doctors' Offices		Social Services Offices	X	Public Health Units		Other		

The information contained in this document is a Departmental:									
	Policy	X	Standard		Protocol		Procedure		Guideline

Title: NWT Guidelines for the Prevention and Control of MRSA Transmission
Effective Date: March 2011

Statement of approved Clinical Practice:

The Chief Public Health Officer and the NWT Medical Directors have approved and are recommending the implementation of the 2011 NWT Guidelines and Management Pathway for the Prevention and Control of MRSA Transmission.

These guidelines include the following standards for care of MRSA

- Clinical Manifestations
- Management
- Prevention and Control
- Decolonization

These new guidelines and the NWT MRSA Management Pathway, March 2011 contain the approved clinical practice standard for the NWT, and supersede all previous clinical practice standards and guidelines.

Attached:

NWT Guidelines for the Prevention and Control of MRSA Transmission

NWT MRSA Management Pathway

- Suspect MRSA Skin and Soft Tissue Infection
- APPENDIX A - Treatment for Skin and Soft Tissue Infections WITH Purulent Cellulitis
- APPENDIX B - Outpatient Treatment for Skin and Soft Tissue Infections with NON-Purulent Cellulitis

This clinical practice is approved. K Kandola

(signature)

Assistant Deputy Minister ☐ Chief Public Health Officer ☒ Director, Child & Family Services ☐ Director, Adoptions ☐

Northwest Territories Health and Social Services

NWT Guidelines for the Prevention and Control of MRSA Transmission

Clinical Manifestations

Mild to moderate Methicillin-Resistant *Staphylococus Aureus* (MRSA) infections present as skin infections consisting of pustules or boils that are red, painful, swollen or have pus or other drainage. The patient often describes it as a "spider bite". Common sites of infection include areas of visible skin trauma, such as cuts and abrasions, and areas of the body covered by hair.

Severe MRSA infections involve complicated, deeper skin and soft-tissue infections, bacteremia and endocarditis, pneumonia, bone and joint infections, meningitis, Central Nervous System disease, toxic shock/sepsis syndromes.

Management

Skin	Culture any skin infections where antimicrobial therapy may be considered.
Furuncle or Carbuncle	Apply warm compresses to the area. Consider surgical drainage if necessary.
Abscess	Incise and drain abscess. Culture moderate to severe abscesses for clinical purposes.

Only use antimicrobial therapy following incision and drainage due to CA-MRSA when there is:

- Severe or extensive disease or rapid progression in presence of associated cellulitis
- Signs and symptoms of systemic illness
- Associated co-morbidities or immunosuppression
- Extremes of age (very young or very old)
- Abscess in area difficult to drain completely
- Associated septic phlebitis
- Lack of response to incision and drainage alone
- Outpatients with purulent cellulitis empirical therapy for CA-MRSA is recommended pending culture results

Please refer to the **NWT MRSA Management Pathway** for specific treatment of mild to moderate MRSA infections. For more severe infections and antimicrobial dosing please consult the internist or pediatrician on call and Infectious Disease Society of America (IDSA) guidelines (http://www.idsociety.org/).

Report ALL MRSA Positive Cultures to the Office of the Chief Public Health Officer - 920-8646

Prevention and Control

Advise Patient to:

- Keep draining wounds covered with clean, dry bandages - change bandage if soaked
- Practice good personal hygiene with regular bathing and hand washing
- Avoid reusing or sharing personal items
- Clean high-touch surfaces and common areas

Please provide patient Superbugs pamphlet.

Hospital, Clinic and Long-Term Care Facilities:

- Use contact precautions
- Isolate patient in a private room or cohort patients with MRSA
- Disinfect all horizontal surfaces, examining tables, equipment and machines, etc.

Please refer to the **NWT Infection Prevention and Control Manual** for full details.

Decolonization

Please consult with the Office of the Chief Public Health Officer prior to initiating decolonization in the patient.

Decolonization should occur with ongoing reinforcement of hygiene measures may be considered in selected cases if:

- There is NO active infection
- There are recurrent skin and soft tissue infections despite optimal wound care and hygiene
- There is ongoing transmission among household members and other close contacts

Treatment:

Nasal decolonization: Mupirocin twice daily for 5-10 days
Topical body decolonization: Skin antiseptic solution (e.g. chlorhexidine) for 5-14 days

Oral antimicrobial therapy is not routinely recommended for decolonization.

March 2011

NWT MRSA Management Pathway

Suspect MRSA Skin and Soft Tissue Infection

STEP 1
Assess Severity of Infection

Mild Infection:
- Infected scratches (no discharge)
- Insect bites
- Furuncle or carbuncle
- Small abscess(es) (requires no packing)

There is absence of systemic illness

Moderate Infection:
- Cellulitis
- Moderate abscess(es)
- Infected wounds
- Multiple infected skin sites

There is minimal/no systemic illness

Is the cellulitis purulent?

YES / NO

Severe Infection:
- Extensive cellulitis
- Large or multiple abscesses
- Deep wounds that are infected
- Associated systemic features: signs and symptoms of bacteremia, endocarditis, pneumonia, bone and joint infections, meningitis, CNS disease, toxic shock and sepsis syndromes

STEP 2
Management of Infection

Wash area with soap and water

Apply warm compresses

Consider incision & drainage of abscess +/- furuncle or carbuncle

Culture infected area

Treat empirically for MRSA. Please refer to **Appendix A** for antimicrobial dosing.

Culture infected area

Treat empirically for B-hemolytic streptococci. Please refer to **Appendix B** for antimicrobial dosing.

Consult specialist and consider hospitalization.

Culture areas of infection and if febrile, culture blood.

If MRSA positive, consult internist or pediatrician on call and IDSA guidelines for specific management.

STEP 3
Control Spread of Infection

Advise Patient to:

- Keep draining wounds covered with clean, dry bandages - change bandage if soaked.
- Clean hands with soap and water or an alcohol-based hand gel.
- Practice good personal hygiene with regular bathing
- Avoid reusing or sharing personal items (e.g. razors, linens and towels)
- Clean high-touch surfaces such as counters, door knobs, bath tubs and toilet seats

Provide patient with Superbugs pamphlet: http://www.hlthss.gov.nt.ca/english/publications/pubresult.asp?ID=291

Clinic Measures:

Institute standard and contact precautions and environmental cleaning as per NWT Infection Prevention and Control Manual.

If no Improvement within 48 hours or worsening infection please reassess.

Institute contact precautions and environmental cleaning as per NWT Infection Prevention and Control Manual.

If there is ongoing transmission of MRSA among household members and close contacts reinforce hygiene measures and consult the Office of the Chief Public Health Officer regarding possible decolonization.

STEP 4 **Report ALL MRSA Positive Cultures to the Office of the Chief Public Health Officer - 920-8646**

Northwest Territories Health and Social Services

NWT MRSA Management Pathway

APPENDIX A - Treatment for Skin and Soft Tissue Infections WITH Purulent Cellulitis

Note: Purulent cellulitis is defined as cellulitis associated with purulent drainage or exudates in the absence of a drainable abscess[1].

Treat patient with most appropriate antimicrobial for 5-10 days, based on clinical judgment.

Treatment	Adult Dose	Pediatric Dose	Important Notes
Clindamycin	300-450 mg PO TID	10-13 mg/kg/dose PO every 6-8 hours, **not to exceed 40 mg/kg/day**	C. difficile-associated disease occurs more frequently with this agent
TMP-SMX	1-2 DS tab PO BID	Trimethoprim 4-6 mg/kg/dose, sulfamethoxazole 20-30 mg/kg/dose PO every 12 hours	**Do NOT use in pregnant women in the 3rd trimester of pregnancy.** **Do NOT use for children under 2 months of age.**
Doxycycline	100 mg PO BID	Less than or equal to 45 kg: 2 mg/kg/dose PO every 12 hours, greater than 45 kg: give adult dose	**Do NOT use in children under 8 years of age.** **Do NOT use in pregnant women.**
Minocycline	200 mg x 1, then 100 mg PO BID	4 mg/kg PO x 1, then 2 mg/kg/dose PO every 12 hours	**Do NOT use in children under 8 years of age.** **Do NOT use in pregnant women.**
Linezolid	600 mg PO BID	10 mg/kg/dose PO every 8 hours, **not to exceed 600 mg/dose**	More expensive than alternatives **Please consult Specialist**

1 Definition as per IDSA guidelines

NWT MRSA Management Pathway

APPENDIX B - Outpatient Treatment for Skin and Soft Tissue Infections with NON-Purulent Cellulitis

Note: Non-purulent cellulitis is defined as cellulitis with no purulent drainage or exudates and no associated abscess[2].

Treat patient with most appropriate antimicrobial for 5 to 10 days, based on clinical judgment.

Treatment	Adult Dose	Pediatric Dose	Important Notes
B-lactam (e.g. cephalexin and dicloxacillin)	500 mg PO QID	Please consult a pediatrician and refer to Red Book[3].	
Clindamycin	300-450 mg PO TID	10-13 mg/kg/dose PO every 6-8 hours, not to exceed 40 mg/kg/day	Provides coverage for both B-hemolytic streptococci and CA-MRSA. C. difficile-associated disease occurs more frequently with this agent
B-lactam (e.g. amoxicillin) **and/or** TMP-SMX or a tetracycline	Amoxicillin: 500 mg PO TID **AND/OR - choose one of the following:** TMP-SMX: 1-2 DS tab PO BID Doxycycline: 100 mg PO BID Minocycline 200 mgx1, then 100 mg PO BID	Amoxicillin: Please refer to Red Book[3] **AND/OR - choose one of the following:** Trimethoprim 4-6 mg/kg/dose, Sulfamethoxazole 20-30 mg/kg/dose PO every 12 hours Doxycycline: Less than or equal to 45 kg: 2 mg/kg/dose PO every 12 hours, greater than 45 kg: give adult dose Minocycline: 4 mg/kg PO x 1, then 2 mg/kg/dose PO every 12 hours	**TMP-SMX: Do NOT use in pregnant women in the 3rd trimester of pregnancy. Do NOT use for children under 2 months of age.** **Doxycycline and Minocycline: Do NOT use in children under 8 years of age. Do NOT use in pregnant women.**
Linezolid	600 mg PO BID	10 mg/kg/dose PO every 8 hours, **not to exceed 600 mg/dose**	More expensive than alternatives **Please consult Specialist**

2 Definition as per IDSA guidelines

3 Pickering, L.K, ed. 2009 Red Book: Report of the Committee on Infectious Diseases. 28th Edition. American Academy of Pediatrics, 2009.