Scabies Outbreak in Red Deer

Date: December 18, 2023

To: Red Deer Family Physicians and Dermatologists; U of A Family Medicine Residents, Nurse Practitioners, Red Deer Regional Health Centre Physicians and Staff, Central Zone Medical Affairs, Infection Prevention Control, Workplace Health & Safety, Emergency Medical Services, Environmental Public Health; Communications

Cc: Safe Harbour, Mustard Seed, Amethyst House, Street Clinic, Central Alberta Women's Shelter

From: Dr. Digby Horne, Medical Officer of Health, Central Zone

Subject: Suspected Scabies Outbreak (EI 2023-1782) at Safe Harbour Shelter, Red Deer

Please be advised that 4 cases of scabies have been identified at the Safe Harbour Shelter in Red Deer, resulting in an outbreak being declared.

Scabies is a rash with an itch (often worst at night) caused by a skin infestation with the mite Sarcoptes scabiei. Areas of the body with a thin outer layer of skin and low concentrations of oil glands are more likely to be affected. Common locations for rash include between fingers, sides of feet, front of wrists and knees, backs of elbows, genital and groin area, areolae of breasts, arm pits, umbilicus, waistline, and lower half of buttocks. Crusted scabies, a chronic infestation in persons who are immunocompromised, debilitated, have decreased sensation, or an inability to scratch, causes crusted, scaling, yellow-white and red fissured lesions, subject to infection.

Transmission occurs primarily through prolonged skin-to-skin contact, for example, 5 minutes or more. In Crusted scabies, transmission can occur from brief skin contact; risk from clothing, bedding, and furniture is much higher than from regular scabies. Symptoms develop over 4 to 6 weeks, but transmission can occur during this time.

Diagnosis using skin scrapings, or a burrow-ink test is recommended (see enclosure).

Treatment is with 5% permethrin cream, available over-the-counter. Two treatments, a week apart are often recommended. Oral ivermectin is an off-label option if permethrin is not practical or has failed; two treatments 1-2 weeks apart are required since ivermectin does not kill eggs.

Prophylactic treatment of persons with prolonged skin-to-skin contact, such as household contacts, sexual contacts, friends or family, visitors, and health care workers, is normally recommended. However, due to a lack of reliable contact information on the cases, prophylactic treatment for recent shelter users now located at other shelters or hospitalized, is not currently recommended.

Action: Consider the possibility of scabies in persons with an itchy rash who have used Safe Harbour shelter in December and use skin scrapings or a burrow-ink test for confirmation. Report hospitalized cases to IPC and community cases to Environmental Public Health at 1-866-654-7890.

Thank you for your attention and assistance.

For more information, contact
p: 587-797-0783 f: 403-592-4966
moh.central@ahs.ca | ahs.ca/czmoh

Scabies Testing for Clinicians

Central Zone

The laboratory requisition form and case reporting references in this resource are zone specific.

Skin Scraping

(adapted from "Management of Scabies in Long Term Care Facilities" 2019 by Winnipeg Regional Health Authority).

Skin scraping is used with microscopy to identify mites, eggs, and feces (scybala). Negative tests do not rule out an infestation.

Equipment

- gloves
- magnifying glass (if available)
- light source
- alcohol swabs
- #15 scalpel blades
- sterile collection container, for example a screw-top urine culture container

Site for Scrapings

Identify recent non-excoriated, non-inflamed, burrows or papules.

- Burrows are most commonly found between the fingers, sides and back of foot, folds on the front of the wrist, umbilicus and waistline, lower half of the buttocks and nearby thighs, back part of the elbow, above the kneecap, front and back of axillae, breasts (skin surrounding the areolae, especially in women), glans and shaft of penis, scrotum, and in infants and young children, on the head, neck, scalp, palms, and soles.

Procedure

1. Explain the procedure to the patient and perform hand hygiene.
2. Use an alcohol swab to scrub the area to be scraped for 30 seconds and allow to air dry.
3. Don gloves.
4. Scrape the selected area 6-7 times with the scalpel blade until tiny specks of blood appear.
5. Place scrapings on a piece of paper before transferring to the screw-top container, or directly into the container if practical.

Submission

Please use the DynaLIFE, Central Zone Specific, Microbiology Requisition.

- Under the “Parasites” section, mark the “Parasite/Arthropod Identification (not stool)” box.
- If the specimen is related to a specific outbreak, add the exposure identification (EI) number under the “Provide Relevant Clinical Signs/ Symptoms/ Reason for Testing” section of the requisition.

Medical Officers of Health, Central Zone
moh.central@ahs.ca | www.ahs.ca/czmoh
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Alberta Health Services
Medical Officers of Health

Burrow Ink Test *(adapted from "Management of Scabies in Long Term Care Facilities" 2019 by Winnipeg Regional Health Authority).*

The Burrow Ink Test (BIT) can be used as an alternative to skin scrapings to assist with the diagnosis of scabies. It is less invasive and does not require professional training to perform. The ink test does not always identify the presence of scabies mites (which occasionally appear as a tiny dark dot at the end of a track), but it can help identify the mite's track as it burrows. A negative test does not rule out scabies.

Equipment

- gloves
- alcohol swabs
- dark coloured washable wide-tipped marker

Site for BIT

See Skin Scrapings (page 1).

Procedure

1. Explain the procedure to the patient and perform hand hygiene.
2. Use the marker to colour over areas of suspected burrows.
3. Wipe off ink with alcohol swabs or alcohol-based hand rub and disposable towel.
    - The alcohol will remove most of the surface ink but will not remove ink taken up by the burrow, thus leaving a dark, irregular (often zig-zag) line indicating the burrow track(s).
    - If the patient has straight lines that take up ink, these may be due to scratching and not the presence of burrowing mites.

Case Reporting

Please report all cases, including cases which have not been tested, to Environmental Public Health by email or phone.

- email: ahs.cz.eph.diseasecontrolteam@ahs.ca
- phone 1-866-654-7890

DynaLIFE MEDICAL LABS

MICROBIOLOGY REQUISITION
ONLY ONE SPECIMEN PER REQUISITION

PHYSICIANS: Inquiries about test results or for test information, contact:
ALBERTA HEALTH SERVICES CLIENT RESPONSE CENTRE (780) 407-7484

Scanning Label or Accession # *(lab only)*

Patient

PHN / Healthcare Number Expiry:_____	Alternate Identifier		
Legal Last Name	Legal First Name	Middle Name	Date of Birth *(dd-Mon-yyyy)*
Preferred Name	☐ Male ☐ Female ☐ X (Non-Binary/Prefer not to Disclose)		Phone
Address	City / Town	Province	Postal Code

Provider(s)

Authorizing Provider Name *(Last, First, Middle)*		
Address		
CC Provider ID / CC Submitter ID / Legacy ID		
Clinic / Building Name		

Copy To 1

Authorizing Provider Name *(Last, First, Middle)*
Address
Phone
Clinic / Building Name

Copy To 2

Authorizing Provider Name *(Last, First, Middle)*
Address
Phone
Clinic / Building Name

Collection

Date *(dd-Mon-yyyy)*	Time *(24h)*	Location	Collector ID	☐ Third Party Bill? Client:

ADDITIONAL REQUESTS:

PROVIDE RELEVANT CLINICAL SIGNS / SYMPTOMS / REASON FOR TESTING
Please print. If incomplete, testing may be cancelled.

Example: EI 2023-1782

Must notify laboratory with suspected level 3 organisms
(i.e. Brucella, Francisella, dimorphic fungi, etc.)

For AFB, viral and atypical bacteria, submit with a ProvLab requisition.

☐ **PREGNANT**
☐ **IMMUNOSUPRESSED**
ANTIBIOTICS (Specify): _____

BLOOD AND OTHER STERIL

BLOOD CULTURE:
☐ Blood Culture, Routine
Includes Candida
O Peripheral Venipuncture
O Arterial Line O Central Line
O Peripheral Line
O Other: _____

CEREBROSPINAL FLUID (CSF):
☐ CSF Culture, Routine
NOTE: If CJD suspected, must notify lab
☐ Fungal Culture other than Candida / Cryptococcal Antigen
O Lumbar Puncture
O CNS Shunt
O Ventriculoperitoneal Shunt (VP)
O External Ventricular Drain (EVD)
O Other: _____

BODY FLUIDS–ASPIRATES
NOTE: Do NOT submit a swab
☐ Fluid Culture, Routine
Includes Anaerobic Culture
☐ Fungal Culture other than Candida
O Prosthetic Joint Related
O Pleural O Peritoneal
O Peritoneal Dialysis
O Synovial-specify: _____
O Other: _____

BODY FLUIDS – DRAINAGE:
☐ Fluid Culture, Routine
☐ Fungal Culture other than Candida
Specify Site: _____
O Indwelling Drain (e.g. [illegible])
O Other: _____

WOUNDS / ABSCESS / SURGICAL SPECIMEN

SURFACE <2 CM (Must specify site):
☐ Wound Swab Culture
☐ Fungal Culture other than Candida
Body Site: _____
O Wound O Surgical
O Abscess O Incision
O Chronic Infection

DEEP WOUND >2 CM (Must specify site)
☐ Deep Wound Culture
Includes Anaerobic Culture
☐ Fungal Culture other than Candida
Body Site: _____
O Wound O Abscess O Ulcer
O Surgical O Diabetic Abscess
O Chronic Infection

TISSUE (Must specify site):
☐ Tissue Culture, Routine
☐ Fungal Culture other than Candida
☐ H. pylori Culture
Body Site: _____
O Prosthetic Joint Related
O Gastric O Duodenal

FOREIGN BODY

☐ Implanted Medical Device Culture
☐ Catheter Tip Culture
☐ Fungal Culture other than Candida
Description:
Body Site:

EYES AND EARS

ROUTINE EYE:
☐ Eye Culture, Superficial
O Left O Right
O Conjunctival

INVASIVE EYE:
☐ Eye Culture, Invasive
☐ Fungal Culture other than Candida
O Vitreous/Aqueous Fluid
O Corneal Scraping
O Orbital Fluid
O Orbital Socket
O Other: _____

EAR (EXTERNAL CANAL):
☐ Ear Culture, External
☐ Fungal Culture other than Candida
O Left O Right
O T-Tube in place

PRENATAL

☐ Group B Streptococcus Screen
(Vaginal/Rectal)
O Penicillin Allergy

FUNGAL DERMATOPHYTES

☐ Fungal Culture other than Candida
O Hair O Nail O Skin Scraping
Body Site: _____

URINE

☐ Urine Culture
O Urine, Midstream
O Urine, Cystoscopy
O Catheter, Straight Out
O Catheter, Indwelling
O Other: _____

Indication (Required):
Symptomatic:
O Lower UTI/Cystitis Symptoms or Signs
O Suspected Urosepsis / Pyelonephritis
O Suspect UTI in MS or Neurogenic Bladder Patient
O Other: _____

Asymptomatic:
O Pregnant
O Prior to Invasive Urologic Procedure
O <1 month post renal transplant

RESPIRATORY TRACT

THROAT:
☐ Acute Pharyngitis Screen (ESwab)
(Group A Strep and Arcanobacterium)
☐ Throat, Cystic Fibrosis
O Treatment Failure
O Penicillin Allergy
O Previous Indeterminate Result (< 10 days)

MOUTH/TONGUE:
☐ Oral Candidiasis
O Mouth O Tongue

NASAL/NOSE:
☐ Staphylococcus aureus Carrier Culture

SPUTUM:
☐ Sputum Culture, Routine
☐ Sputum, Cystic Fibrosis
☐ Fungal Culture other than Candida
O Sputum Expectorated
O Endotracheal Tube Aspirate (ETTS)
O Tracheostomy Aspirate
O Auger Suction

BRONCHIAL:
☐ Bronchial Culture, Routine
☐ Bronchial Culture, Cystic Fibrosis
☐ Other: _____
O Bronchial Wash
O Bronchoalveolar Lavage
O Site _____

GASTROINTESTINAL TRACT

☐ Bacterial Enteric Panel
☐ C. difficile Test
*Submit specimen with **"Enteric Pathogens Patient History Form"***

PARASITES

☐ Stool Parasite Screen (Giardia and Cryptosporidium Screen)
☐ Ova and Parasites (Stool)
☐ Pinworm (Paddle)
☒ Parasite/Arthropod Identification (not stool)
*Submit specimen with "**Enteric Pathogens Patient History Form***

GENITAL TRACT

For Chlamydia / Gonorrhea / Trichomonas (NAAT) Screening complete General Laboratory Requisition
☐ Bacterial Vaginosis / Yeast (Vaginal)
☐ Candidiasis Susceptibility (Vaginal)
☐ Genital Culture, Bacterial (Clinical history required):
O Vaginal O Cervix O Vulva O Penis O Perianal
O Perineum O Urethral O Other: _____
☐ Gonorrhea Culture for Susceptibility - *by indication only*
O Rectal O Cervix O Urethra O Other: _____
☐ Trichomonas Vaginalis Screen (Female <14Y / Male Only) O Site _____

Transport Device:
ESwab for all requests

ANTIBIOTIC RESISTANT ORGANISMS

☐ MRSA SCREEN O Nose O Groin O Axilla O Other: _____
☐ VRE SCREEN O Rectal O Feces

OTHER ANTIBIOTIC RESISTANT ORGANISMS - *Reserved for IPC use only*

☐ **Organism**: _____ **Source**: _____

FOR INFORMATION ON SPECIMEN COLLECTION, STORAGE, TRANSPORT, AND OTHER FORMS SEE: www.dynaLIFE.ca