

THE NORTHER ANTIBIOTIC RESISTANCE PARTNERSHIP (NARP) ACTIVE SURVEILLANCE PROTOCOL

Purpose: This document describes the protocol for the Active Surveillance project.

Questions: For detailed information regarding the study please contact:

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Introduction: This study is designed to enhance the collection of data, including microbiologic information (organism identification and susceptibility data), prescribing practices, and general patient demographic information for clients in Northern Saskatchewan. Physicians from the LaLoche, Sandy Bay, and LaRonge clinics are encouraged to participate in this enhanced surveillance. The study will include their work at their regular clinics as well as work in the emergency rooms in the community hospital and their visits that generate clinical data collected from surrounding regions. Information collected will be merged with data from other health regions to understand the antimicrobial resistance patterns of organisms circulating in the various communities. The project design ensures that the physicians will have access to the antimicrobial susceptibility data in their area and be able to compare it to other areas involved in the study.

Approval

This project has been approved by the Canadian Institutes of Health Research, the Research Ethics Boards of Health Canada, the University of Manitoba, and the University of Saskatchewan. Documents are available upon request.

Protocol:

Specific clinical syndromes with a high likelihood of bacterial infection will trigger the physician to initiate the study protocol. These syndromes will include urinary, skin/soft

tissue, defined upper respiratory tract infections, and defined lower respiratory tract infections. Please use the definitions outlined for these infections documented in **Appendix 1**.

Patient information requested will be the same as what is normally requested by the Saskatchewan Disease Control Laboratory. We do not want to interrupt the existing protocols and reporting mechanisms. Therefore, if you do require a specimen work-up stat, please follow the routine/current mechanisms in place with the Nipawin Laboratory. However, if you normally would not take a specimen but suspect a bacterial infection, we encourage you to take a specimen according to **Appendix 1** and fill out a Saskatchewan Provincial Laboratory requisition form. Once completed please send the specimen and Provincial Laboratory requisition to the Nipawin Lab in the tote container provided along with your regular specimens. Your additional specimens will be routed to the lab in Regina via the Nipawin Lab. The specimens will be processed routinely at the Provincial Laboratory and results will be sent to you upon completion of the work-up. It should be noted that there may be a delay of one or two days in comparison to the Nipawin Laboratory due to the transportation of specimens to the Provincial Laboratory. It is therefore imperative that you do not alter your regular sampling procedures. Instead, additional specimens not normally collected will be routed through the Provincial Laboratory.

A letter has been sent to the College of Physicians and Surgeons in Saskatoon, SK. to inform them of the potential increase in specimens collected by you for this study. If you have any questions please do not hesitate to contact the study organizers listed at the beginning of this document.

APPENDIX 1

Skin and Soft Tissue Infections

A swab of the infected area is requested.

Folliculitis: Abscesses developed in the superficial layers of skin where hair follicles are identified as the port of entry. Collect a specimen from the site of infection.

Furuncles, Carbuncles, or Boils: A swab specimen from the draining lesion is preferred. If no drainage is observed there is no need to collect a specimen.

Impetigo: This is a disease characterized by thick-crusting lesions with rounded or irregular margins. A swab specimen from the lesion is preferred.

Cellulitis: This ailment is recognized as an acute inflammatory condition of the skin characterized by localized pain, erythema, swelling and heat. The area of erythema is a paler pink than the flaming red of erysipelas, and has indistinct margins. If drainage is observable, collect a swab specimen.

Urinary Tract Infections

A documentation of cystitis which is usually associated with a painful micturition (dysuria), which may be associated with frequency, urgency, strangury, initial and terminal hematuria, suprapubic discomfort and voiding small amounts of turbid urine. A urine specimen is strongly recommended for the above symptoms.

Urine for Bacterial Cultures

Instructions for female patients to collect midstream urine for bacterial culture:

Wash hands thoroughly with soap and water, rinse them, and dry them on a disposable paper towel or shake off excess water.

Spread labia, with one hand, and keep them continuously apart.

Take the open sterile cup in the other hand without touching the rim or inner surface of the cup or lid.

Void 20 to 25 ml into the toilet and catch a portion of the rest of the urine in the container without stopping the stream. Do not touch the legs, vulva, or clothing with the cup.

Place the lid on the cup securely.

Instructions for male patients to collect midstream urine for bacterial culture:

Wash hands thoroughly with soap and water, rinse them, and dry them on a disposable paper towel or shake off excess water.

Retract the foreskin completely.

Void 20 to 25 ml into the toilet and catch a portion of the remaining urine in the cup without stopping the stream. Do not touch the penis or clothing with the cup.

Place the lid on the cup securely.

Indwelling catheter urine:

Do not collect urine from the drainage bag because growth of bacteria outside the catheter may have occurred at this site.

Clean the catheter with an alcohol pad.

Use a sterile needle and syringe to puncture the tubing. Aspirate the urine directly from the tubing.

Transfer the urine to a sterile specimen container.

Urine catheter tip cultures are not acceptable.

Respiratory Tract Infections

Sputum

In order to produce the highest yield of significant bacterial cultures, the study will focus on patients who are productive of purulent sputum only.

Assure patient cooperation to get an adequate specimen. Microbiology will determine the number of squamous epithelial cells present for specimen adequacy.

Instruct the patient as follows:

Rinse mouth with tap water to remove food particles and debris.

Have patient breathe deeply and cough several times to achieve a deep specimen.

Patient should expectorate into dry, sterile container.

Transport immediately at ambient temperature. Refrigerate if a delay of more than one hour is anticipated.

Throat

Throat swabs should be collected from patients with pharyngitis and/or tonsillitis. Use a cotton, Dacron, or calcium alginate swab.

Use a tongue blade and a good light source to ensure good visualization.

Reach behind the uvula and swab:

both tonsillar fauces, the posterior pharynx, and any ulceration, exudate, lesion, or areas of inflammation.

Place the swab into the transport media and transport at ambient temperature.

Specimen handling

Label the specimen container immediately with the patient's name, date of birth and personal health number.

Complete the requisition, supplying as much clinical information as possible.

Specimens intended for the Provincial Laboratory should be packed in the totes provided, following the instructions given.