

DATE:	2021 July 26
TO:	Alberta Children's Hospital (ACH) Physicians and Nurses
FROM:	Acute Microbiology, South Sector, Alberta Precision Laboratories (APL)
RE:	Rectal swabs for the detection of STEC and other pathogens

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- Effective **immediately**, rectal swabs collected using COPAN FecalSwab® will be accepted as an alternative specimen to test for enteric bacterial pathogens in children seen at ACH in the following scenarios:
 - hemolytic uremic syndrome
 - hematochezia
 - neurological sequelae of gastroenteritis (e.g., seizures)
- A stool specimen should be submitted to the lab when available, as stool is more sensitive than rectal swabs for the detection of pathogens¹.
- Swab specimens will be tested for Shiga toxin-producing *E. coli* (STEC), *Salmonella*, *Shigella* and *Campylobacter* using the Bacterial Enteric Panel, a polymerase chain reaction (PCR) assay that is also routinely used to test diarrheal stool specimens. Culture will be performed on any PCR-positive specimens.

Why This is Important

- For children with severe sequelae of STEC infection such as hemolytic uremic syndrome (HUS), a stool specimen may not be collectable in a clinically meaningful timeframe. Rectal swabs offer a suitable alternative type until stool can be collected.

Actions Required

If a stool specimen is not collectable and testing from a rectal swab is required:

- COPAN FecalSwab® are available for patients in the ED. Wards or clinics that are likely to use these swabs can order via CPSM (#CA4C024S).
- Only COPAN FecalSwab® should be used (see Appendix for photos of correct swab). **DO NOT** submit using another swab or media type (i.e., red top amies swab or universal/viral transport media).
- Order "Bacterial Enteric Panel" in SCM and indicate rectal swab as the specimen source.
- Collect the rectal swab and submit to the lab for testing (see Appendix for instructions).
- Submit a stool specimen for the Bacterial Enteric Panel when stool is available. For instructions on stool collection, refer to [Collecting Stool Samples for Bacterial Culture, Rotavirus, Clostridium difficile Toxin, Parasite Screen and/or Ova and Parasites MI6000](#).

Inquiries and feedback may be directed to

- Dr. Byron Berenger, Medical Microbiologist, South Sector, 587-779-5573, Byron.Berenger@aplabs.ca
- Dr. Thomas Griener, Medical Microbiologist, South Sector, 403-770-3811, Thomas.Griener@aplabs.ca

Approved by

- Dr. Dylan Pillai, Medical Director, South Sector

Reference:

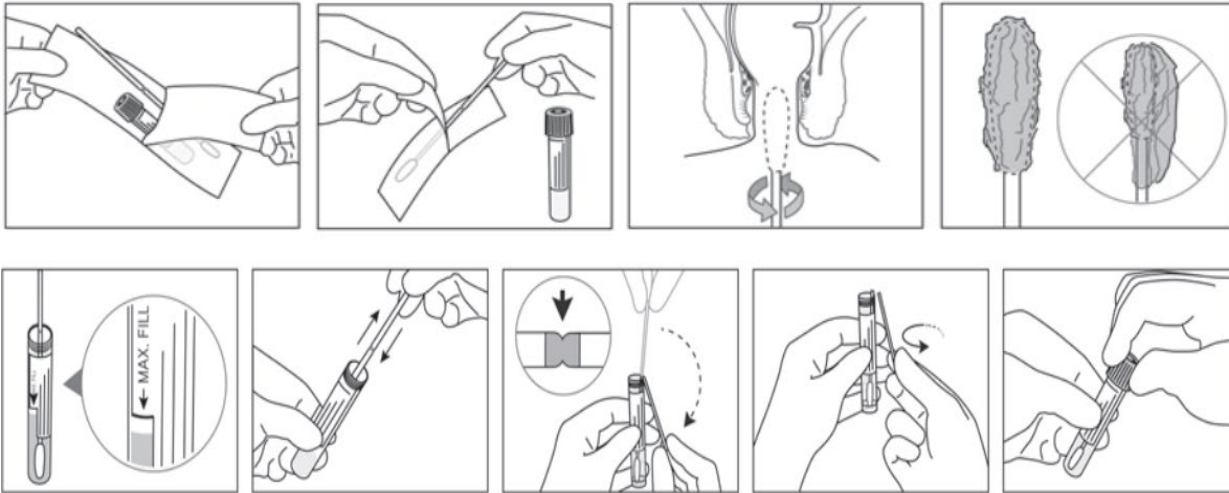
1. Freedman SB *et al.* Enteropathogen detection in children with diarrhoea, or vomiting, or both, comparing rectal flocced swabs with stool specimens: an outpatient cohort study. *Lancet Gastroenterol Hepatol.* 2017 Sep;2(9):662-669. doi: 10.1016/S2468-1253(17)30160-7.



APPENDIX

INSTRUCTIONS ON USING COPAN FecalSwab®:

Insert the flocked swab through the rectal sphincter 2.5 to 3.5 cm (1-1.4inches) and gently rotate. Once done, place the swab in a tube labelled with the patient's name, date of birth, MRN/health care number, collection date, and collection time. Break off the handle end of the swab and screw the cap on. Send to the lab.



USE: COPAN FecalSwab®

DO NOT USE: AMIES/M40



Sources of photos:

COPAN FecalSwab®: <https://www.COPANusa.com/sample-collection-transport-processing/FecalSwab®/>

COPAN FecalSwab® Collection Instructions: FecalSwab® product insert

M40 Amies photo: https://www.interpath.com.au/product/COPAN/amies-gel/408CIS_87