



Medical Directive

Title: Prescribing Medications and Vaccines for Traveller's Health (Pharmacist)

Number: C-FHT5

Activation Date:

Review due by:

Sponsoring/Contact Person(s):

(Name, position, contact particulars)

Kathleen Whittaker, Executive Director

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kathleen.w@carolinefht.ca

<p>Order and/or Delegated Procedure:</p> <p>The clinical pharmacist (RPh) may prescribe certain medications (Appendix 1) and vaccines (Appendix 2) for the purpose of providing travel medicine.</p>	<p>Appendix Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Title: Appendix 1: Select medications for travel health Appendix 2: Select vaccines for travel health</p>
<p>Recipient Patients:</p> <p>1) All patients 5 years and older and; 2) Rostered to C-FHT physicians who have signed the attached authorizer approval form (Appendix 3)</p>	<p>Appendix Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Title: Appendix 3: Authorizer Approval Form</p>
<p>Authorized Implementers:</p> <p>Authorized to C-FHT clinical pharmacist (RPh) (Appendix 4)</p>	<p>Appendix Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Title: Appendix 4: Implementer Approval Form</p>
<p>Indications:</p> <p>1) Vaccine preventable illnesses during travel 2) Prevention of high altitude illness 3) Treatment of traveller's diarrhea 4) Prevention of malaria</p>	<p>Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title:</p>
<p>Contraindications:</p> <p>1) History of an anaphylactic reaction to selected medication and/or vaccine for travel health 2) History of an anaphylactic reaction to any of the components of the selected medication or vaccine 3) Any other contraindication specified in the drug monograph for the selected medication or vaccine</p>	
<p>Consent:</p> <p>The clinical pharmacist (RPh) will obtain verbal consent from the patient or legal substitute decision maker. Potential risks and benefits of travel medications and/or vaccines will be explained along with any associated risks.</p>	<p>Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title:</p>
<p>Guidelines for Implementing the Order/Procedure:</p> <p>Patients will complete a pre-travel questionnaire (Appendix 5) prior to the travel consultation. The clinical pharmacist will review the travel itinerary, planned activities, medical history (medical conditions and medications), and immunization</p>	<p>Appendix Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Title: Appendix 5: CFHT Travel Preparation</p>

history in order to address the associated travel health risks relevant for the patient. Travel health resources (examples include CDC Traveler's Health, CATMAT, Travax, and other national travel advisory resources) will be used to determine which vaccines and medications may be required for the patient. During the travel consultation, the patient will meet with the pharmacist in-person to review the travel health recommendations. Any immunizations will be completed at the visit and follow up appointments will be offered for any future immunizations needed to complete the recommended schedule.

Documentation and Communication:

Appendix Attached: Yes No

Title: Appendix 5: CFHT Travel Preparation

A pre-travel consultation questionnaire will be completed by the patient and documented in the patient chart. Travel health recommendations will be documented in the patient chart. Any vaccinations administered during the visit will be documented in the chart that specifies: brand name, dose/volume, LOT number, expiry date, site of injection, and any adverse reactions if applicable.

Review and Quality Monitoring Guidelines:

Appendix Attached: Yes No

Title:

- 1) Annual routine review by at least one member of medical directive authorizer, one member of implementer and Executive Director.
- 2) Any staff member who identifies any inappropriate, untoward or unanticipated outcomes resulting from this medical directive implementation will immediately notify the most responsible physician and his/her program manager. The program manager, in collaboration with the sponsoring physician, will immediately trigger an ad hoc review

Approving Physician(s)/Authorizer(s):

Appendix Attached: Yes No

Title: Appendix 3: Authorizer Approval Form

C-FHT Authorizer Approval Form (Appendix 3)

Appendix 1: Select Medications for Travel Health

Title: Prescribing Medications and Vaccines for Traveller's Health (Pharmacist)

Number: C-FHT05

Indication	Medication	Adult dosing	Pediatric dosing	Duration	Notes
Prevention of high altitude illness	Acetazolamide	125mg BID	Not recommended	Begin the day before ascent, discontinue after 2-3 days at same elevation or if descent initiated	
	Ciprofloxacin	500mg BID x 3 days or 500-1000mg x 1 dose	Not recommended	1 - 3 days	
Treatment of Traveller's Diarrhea	Levofloxacin	500mg OD x 3 days or 1000mg x 1 dose	Not recommended	1 - 3 days	
	Azithromycin	500mg OD x 3 days or 1000mg x 1 dose	5-10mg/kg OD x 3 days (max 500mg)	1 - 3 days	Safe in pregnancy and breastfeeding
	Malarone (atovaquone-proguanil)	1 adult tablet OD	Dosing uses pediatric tablet once daily 5-8kg: 1/2 tablet 8-10kg: 3/4 tablet 10-20kg: 1 tablet 20-30kg: 2 tablets 30-40kg: 3 tablets >40kg: 1 adult tablet	Begin 1-2 days before travelling to endemic area and continue for 7 days after leaving area	Avoid if CrCl < 30mL/min Not recommended in pregnancy or breastfeeding
Prevention of Malaria	Primaquine	52.6mg weekly	0.8mg/kg daily		Contraindicated in G6PD and pregnancy
	Chloroquine	500mg weekly	5mg/kg weekly (max: 500mg)	Begin 1-2 weeks before travelling to endemic area and continue for 4 weeks after leaving area	1 tablet = 250mg (salt) = 155mg (base) Safe in pregnancy May exacerbate psoriasis Limit cumulative dose < 100g base Screen for retinal toxicity
	Hydroxychloroquine	400mg weekly	6.5mg/kg weekly (max 400mg)		Safe in pregnancy May exacerbate psoriasis Screen for retinal toxicity

Indication	Medication	Adult dosing	Pediatric dosing	Duration	Notes
	Doxycycline	100mg daily	2.2mg/kg daily (max: 100mg)	Begin 1-2 days before travelling to endemic area and continue for 4 weeks after leaving area	Contraindicated in pregnancy and children < 8 years old
	Mefloquine	250mg weekly	<9kg: 5mg/kg weekly 9-19kg: 1/4 tab weekly 19-30kg: 1/2 tab weekly 30-45kg: 3/4 tab weekly >45kg: 1 tab weekly	Begin > 2 weeks before travelling to endemic area and continue for 4 weeks after leaving area	1 tablet = 250mg (base) = 274mg (salt) Contraindicated in those with history of seizures, active depression, psychosis, schizophrenia or other major psychiatric disorders.

Appendix 2: Select Vaccines for Travel Health

Title: Prescribing Medications and Vaccines for Traveller's Health (Pharmacist)
Number: C-FHT05










Vaccine Preventable Disease	Immunizing Agent/Vaccine(s)	Dose/Volume	Route	# Doses	Interval	Notes
Hepatitis A	Avaxim	0.5 mL	IM	2	0, 6-36m	≥12 years old
	Havrix 1440	1 mL	IM	2	0, 6-12m	≥19 years old
	Avaxim-Pediatric	0.5 mL	IM	2	0, 6-36m	6 months – 15 years old
	Havrix 720 Jr	0.5 mL	IM	2	0, 6-12m	6 months – 18 years old
Hepatitis B	Engerix-B	1 mL	IM	2-4	See notes	2 dose series (11-15 year old): 0, 6m 3 dose standard (≥20 years): 0, 1, 6m 4 dose accelerated (≥20 years): 0, 1, 2, 12m 4 dose rapid (≥20 years): 0, 7d, 21d, 12m
	Engerix-B Pediatric	0.5mL	IM	3-4	See notes	3 dose standard (0-19 years): 0, 1, 6m 4 dose accelerated (0-19 years): 0, 1, 2, 12m
	Recombivax HB	1 mL	IM	2-3	See notes	2 dose series (11-15 year old): 0, 4-6m 3 dose standard (≥20 years): 0, 1, 6m
	Recombivax HB-Pediatric	0.5 mL	IM	3	0, 1, 6m	0, 1, 2m is authorized but less preferred
Hepatitis A + Hepatitis B (Combination Vaccine)	Twinrix	1 mL	IM	2-4	See notes	2 dose series (1-15 year old): 0, 6-12m 3 dose standard (≥19 years): 0, 1, 6m 4 dose rapid (≥19 years): 0, 7d, 21d, 12m If < 21 days before travel, give monovalent Hep A and Hep B vaccines separately
	Twinrix Jr	0.5 mL	IM	3	0, 1, 6m	1-18 years old
Typhoid	Typhim	0.5 mL	IM	1	N/A	≥ 2 years old Complete at least 2 weeks before travel Booster every 3 years if needed
	Vivotif	1 capsule	PO	4	Days 1, 3, 5, 7	≥ 5 years old Complete at least 1 week before travel Booster every 7 years if needed
Typhoid + Hepatitis A (Combination Vaccine)	Vivaxim	1 mL	IM	2	0, 6-36m	≥16 years old Complete at least 2 weeks before travel Booster with Hep A vaccine at 6-36m or Vivaxim at 36m if need ongoing typhoid protection

Vaccine Preventable Disease	Immunizing Agent/Vaccine(s)	Dose/Volume	Route	# Doses	Interval	Notes
Cholera and Enterotoxigenic E. coli (ETEC)	Dukoral	1 vial	PO	2-3	1 week apart	Complete at least 1 week before departure For cholera: 2-5 years: 3 doses 6 years and older: 2 doses For ETEC: 2 years and older: 2 doses
	Ixiaro	0.5 mL	IM	2	0, 28 days	Must complete 10-14 days prior to travel Booster 12-24m if ongoing exposure
Yellow Fever	YF-Vax	0.5 mL	SC	1	N/A	Contraindicated < 6 months old, egg allergy, thymus disorder w/ abnormal immune cell function, immunosuppression (symptomatic HIV, malignant neoplasms, transplant, primary immunodeficiency, immunosuppressive or immunomodulatory therapy, radiation therapy) Caution > 60 years, pregnancy, breastfeeding, asymptomatic HIV (w/ CD4+ counts between 200-500)
Rabies	IMOVAX Rabies	1 mL	IM	3	0, 7d, 21-28d	
	RabAvert	1 mL	IM	3	0, 7d, 21-28d	Caution in egg allergy
Meningococcal disease	Menactra (Men-C-ACYW)	0.5 mL	IM	1-2	See notes	<2 years old: refer to monograph 2-55 years old: 1 dose
	Menveo (Men-C-ACYW)	0.5 mL	IM	1-4	See notes	<2 years old: refer to monograph ≥2 years old: 1 dose
	Nimenrix (Men-C-ACYW)	0.5 mL	IM	1-3	See notes	<1 year old: refer to monograph ≥1 year old: 1 dose
	Bexsero (4CMenB)	0.5 mL	IM	2-4	See notes	<2 years old: refer to monograph 2-25 years old: 2 doses (≥1 month apart)

Appendix 3: Authorizer Approval Form

Title: Prescribing Medications and Vaccines for Traveller's Health (Pharmacist)

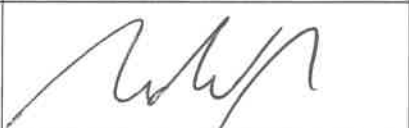
Number: C-FHT05

Name of Authorizer	Signature	Date
Dr. Lori Chalklin		9/13/2019
Dr. Stephen Duncan		9/13/2019
Dr. Alicia Gallacio		9/13/2019
Dr. Dana Pinte		5/11/2019
Dr. Robert Tohn		9/13/2019
Dr. David Wallik		9/26/2019
Dr. Kim Walsh		9/13/2019
Dr. Chris Williams		9/13/2019
Dr. Helena Liu		9/18/2019

Appendix 4: Implementer Approval Form

Title: Prescribing Medications and Vaccines for Traveller's Health (Pharmacist)

Number: C-FHT05

Name of Implementer	Signature	Date
Michael Pe, RPh		Sept 13, 2019

Appendix 5: CFHT Travel Preparation Questionnaire

Title: Prescribing Medications and Vaccines for Traveller's Health (Pharmacist)

Number: C-FHT05



Travel Clinic

Please complete this form and submit it at least 24 hours prior to your scheduled appointment.
This form may be submitted in person to the reception desk or emailed to travel@carolinefht.ca
Please remember to bring your immunization record to the appointment.

Date: _____

Contact Information:

Last Name: _____ First name: _____

Street: _____

City: _____ Province: _____ Postal Code: _____

Phone (Home): _____ (Work): _____ (Cell): _____

E-mail: _____

Medical Information:

Do you have any of the following allergies?

No known drug allergies

Egg

Sulfa drugs

Penicillin

Ciprofloxacin

Doxycycline

Azithromycin

Malarone

Other: Please specify: _____

For women only:

Are you pregnant? No Yes _____ weeks Planning within 3 months

Are you breastfeeding? No Yes

Do you have any of the following medical conditions?

No medical conditions

Seizures Diabetes Depression Anxiety

G6PD deficiency Heart disease Thymus disease Asthma

Immunodeficiency (ie. HIV, cancer, transplant) specify: _____

Inflammatory bowel disease Blood disorders (coagulation disorders) Other: _____

Have you had any of the following immunizations?

Hepatitis A	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	<input type="checkbox"/> Yes Date: _____
Hepatitis B	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	<input type="checkbox"/> Yes Date: _____
Typhoid	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	<input type="checkbox"/> Yes Date: _____
Yellow Fever	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	<input type="checkbox"/> Yes Date: _____
Japanese Encephalitis	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	<input type="checkbox"/> Yes Date: _____
Dukoral (Traveler's Diarrhea)	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	<input type="checkbox"/> Yes Date: _____
Meningococcal	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	<input type="checkbox"/> Yes Date: _____
Tetanus	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	<input type="checkbox"/> Yes Date: _____
Rabies	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	<input type="checkbox"/> Yes Date: _____

Do you take any medications (including prescription, over the counter and herbals/supplements)?

No medications

I take the following: _____



Travel Clinic

Departure date: _____ Return date: _____ Duration of trip: _____

Purpose of trip: _____

	Countries to be visited	City or town	Duration
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)			

During this trip, do you plan to:

Go outside the city centres at anytime?	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes
Stay outside of hotels?	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes
Go camping?	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes
Go hiking?	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes
Go into caves?	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes
Visit friends or family?	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes
Ascend to high altitudes (2300+ meters or 7000+ feet)	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes
Work with animals?	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes
Have potential sexual contact with new partners?	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes
Possibly receive a manicure, pedicure or tattoo?	<input type="checkbox"/> No	<input type="checkbox"/> Maybe	<input type="checkbox"/> Yes

Do you have any other travel related concerns?

- All of the information on this form is accurate to the best of my knowledge and I understand that any false information could negatively impact my health.