Core Emergency/ Urgent Care Skills Workshop

Practice Ready Assessment (PRA-BC)
Centralized Orientation

September 24, 2026

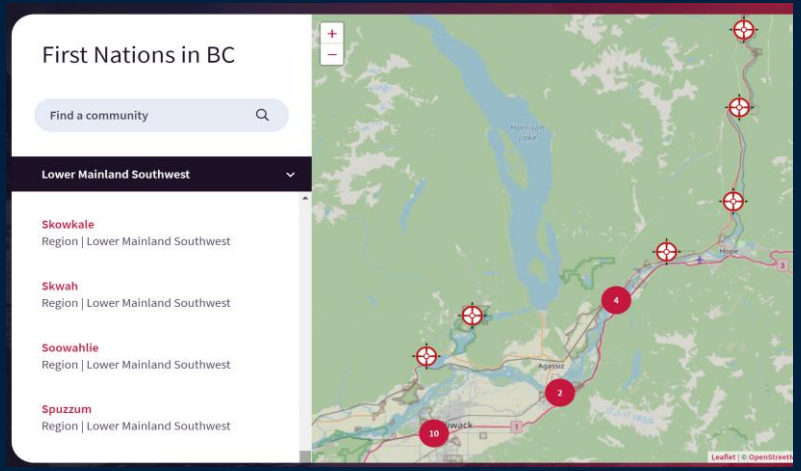
Dr. Susanne Christie

Welcome!

Nelson, BC
Photo by Nelson Kootenay Lake Tourism/Adrian Wagner

Territorial Acknowledgment

Honoured to live, work, and recreate on the traditional, ancestral and unceded territory of Coast Salish People.
Today, we are meeting on the lands of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səlilwətaɬ (Tsleil-Waututh) Nations.



Disclosure

Facilitators:

- Dr. Susanne Christie, BSc MD CCFP (EM)
- Chenyi Zhu, Nurse Practitioner
- Robert Groenhof, Manager BCEHS

Grants: *None*

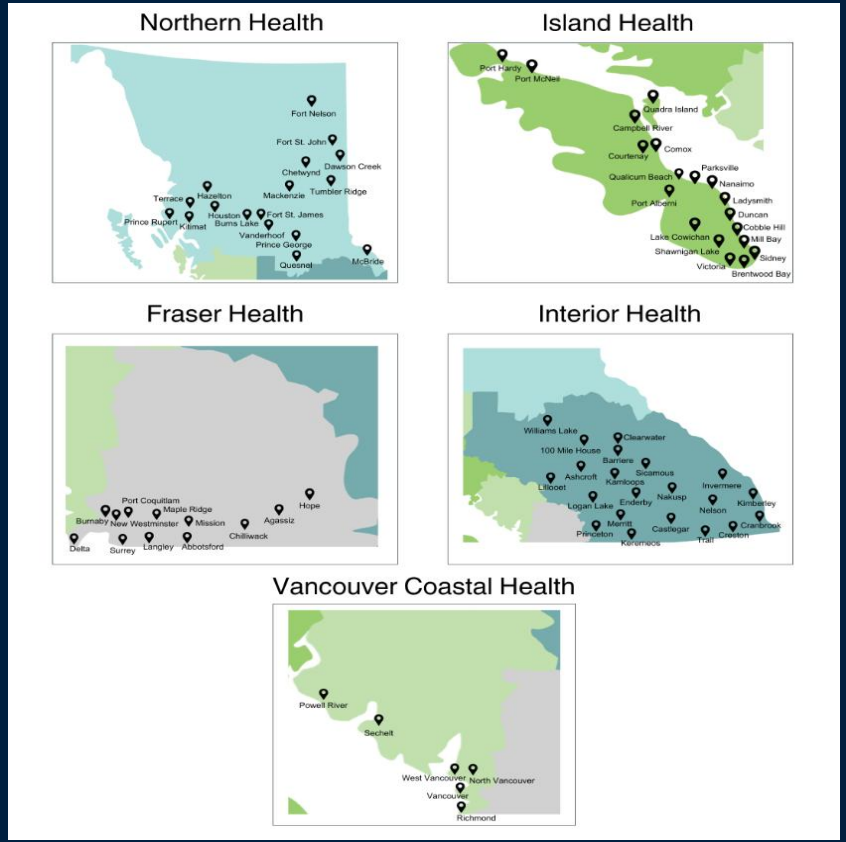
Speaking Fees: *Paid for this lecture*

Life beyond/besides medicine!

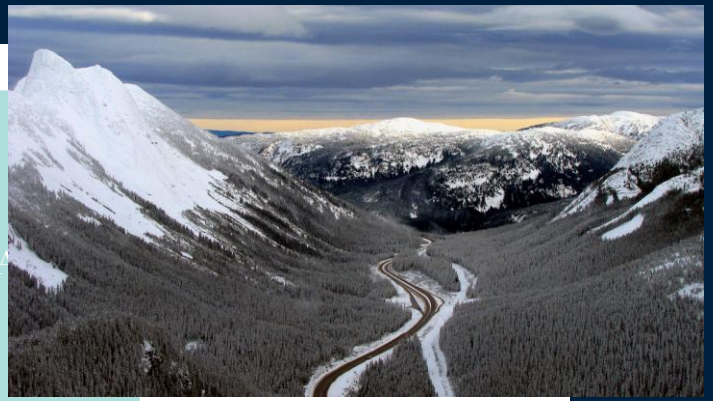
What drives you to be a committed physician serving your patients/community?

What nourish your body, spirit and soul to deal with the stress from work?

PRA-BC – one program, multiple sites



Different Sites – Different Challenges



Managing Bias

No professional or financial bias

Bias: Practicing Acute Care Medicine is the most comprehensive, rewarding, stimulating, full – service practice on the PLANET

Practical Bias that the CARE course is of exceptional educational value for any rural practicing family / ER physician

Objectives

To share our personal and professional experiences relevant to both rural and urban healthcare settings in a focused half-day workshop.

Three topics:

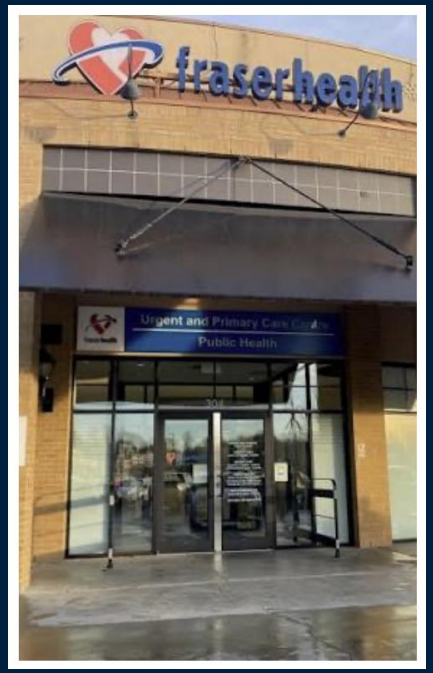
- -Our backgrounds and experiences
- -Interesting case reviews
- -Airway management practical session

Acute Care – Emergency Room (ER)

Does this ER (emergency room) look the same as where you have worked?

Acute Care – Urgent & Primary Care Centre

- Provide (non-emergency) same-day care for urgent, non-life-threatening health concerns.
- Patients are seen in order of urgency by a Family Doctor, Nurse Practitioner, Registered Nurse or a Social Worker.

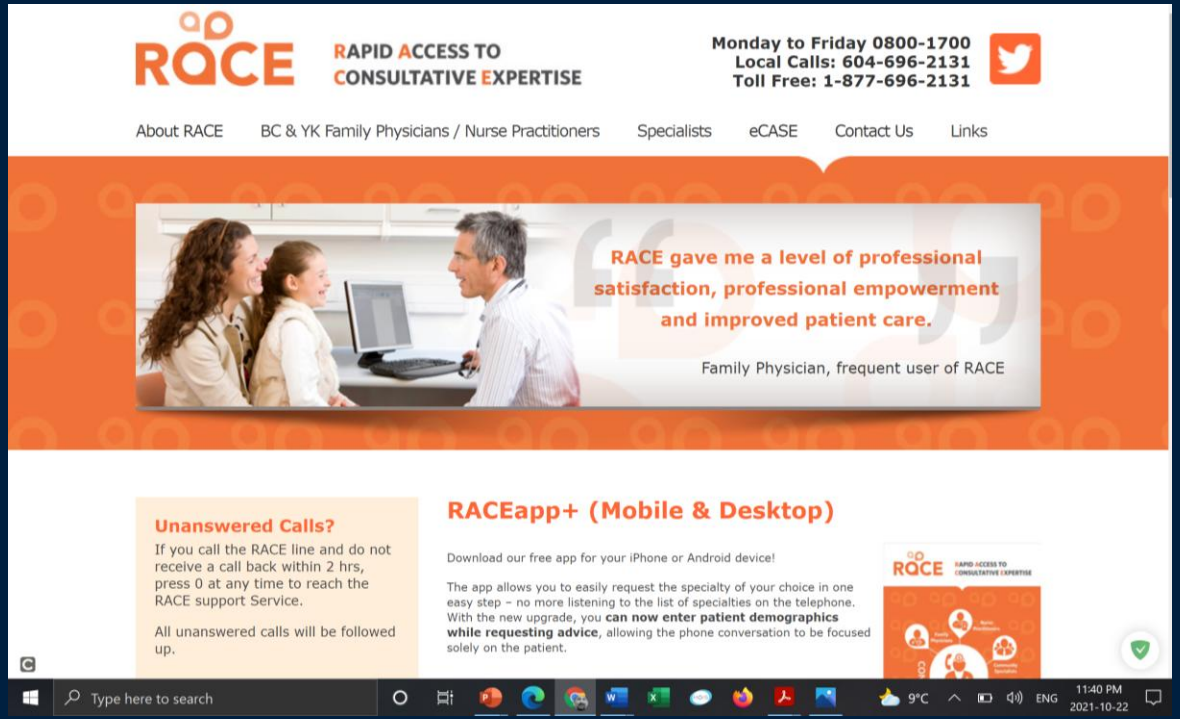


Patient Transfer Network (PTN)

- Part of the BC Emergency Health Services (EHS)
- Works with sending and receiving hospitals to assess patient needs
- Coordinates transfers
- Reviews and prioritizes all requests (triage)
- Connects care teams through a medical teleconference

1-866-233-2337

How to get help – RACE Line/App



http://www.raceconnect.ca/race-app/

How to get help – Rural Coordination Centre of BC (RCCbc) Real-Time Virtual Support

- Real-Time Virtual Support (RTVS) peer pathways for physicians, residents, nurse practitioners, nurses, midwives—and, in some cases, first responders—in rural, remote, and First Nations communities in BC.

- Free and friendly clinical support at the click of a button.

E.g. Emergency - RUDI (Rural Urgent Doctor In-aid)

https://rccbc.ca

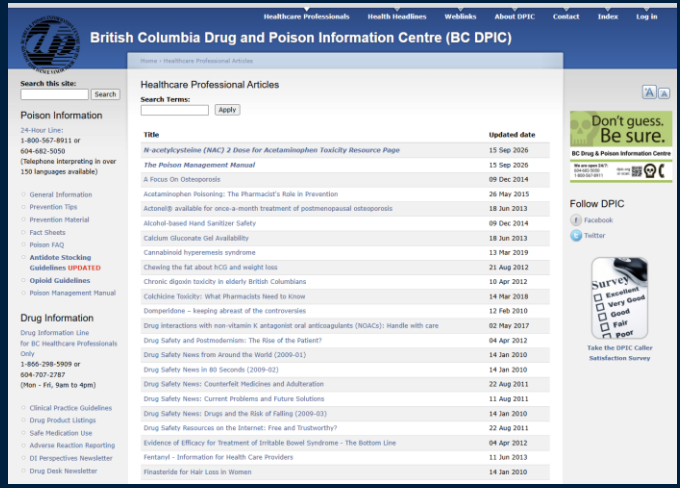
How to get help – BC Drugs and Poison Information Centre

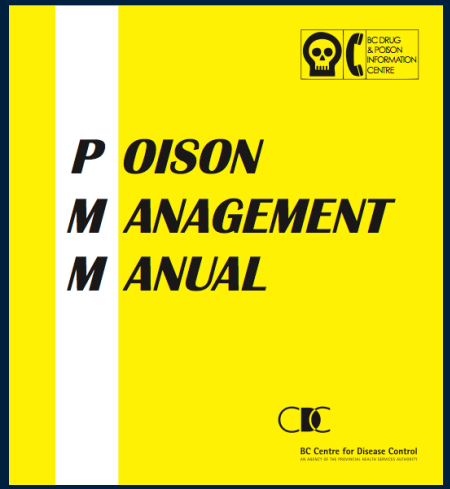
- Poison Information 24 Hour line:

  1-800-567-8911

- Drugs Information Line (M-F, 9am-4pm)

  1-866-298-5909





How to get help – RCCbc: The Care Course

- 2-day, inter-professional, team-oriented learning experience.
- Developed by rural providers for rural physicians, nurses and pre-hospital providers.
- Delivered at local healthcare facilities with local providers.
- Topics: airway management, trauma care, cardiac care, emergency obstetrics, paediatrics, and neonatal care.

Professional Development/Education

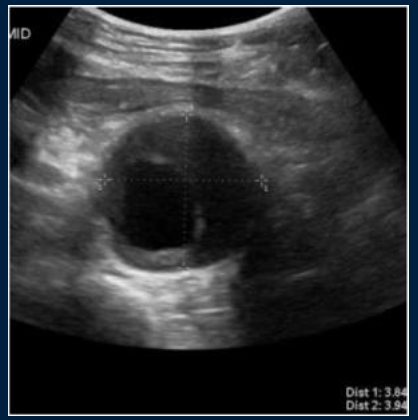
- PRA-BC virtual hub
- BC Emergency Network - https://bcemergencynetwork.ca/resource_type/procedural-video/
- UBC CPD – eLearning
- Annual St Paul's Emergency Medicine Update – Whistler, B
- American Seminar Institute

Procedure/Skills

Beside ultrasound skills

- EDUS
- EDE
- HOUSE

- E.g. Aortic Aneurysm



Rural Mentorship

UBC Rural CPD - Coaching and Mentoring Program (CAMP)

UBC Rural CPD’s Coaching and Mentoring Program (CAMP) is designed to support the diverse needs of physicians, locums, and residents practicing in rural British Columbia. CAMP connects you with experienced peer coaches and mentors to strengthen your clinical and professional skills, build confidence, and foster meaningful connections within rural medical communities.

CAMP offers flexible, personalized coaching and mentoring tailored to your goals and practice context. Physician coaches and mentors can support you virtually, in your community, or at a higher-volume centre—whatever format works best for you.

ER Cases

Case #1

- 82yo female brought in to ER by EHS 10am with worsening of confusion and drowsiness. Lives with family who were concerned when patient didn’t wake up at her usual time. Daughter went to check on her at 08:30 and found her difficult to rouse. When she did manage to wake her mom up, daughter noticed patient was confused and drowsy. Patient was last seen normal last night at approximately 10pm. No preceding history of acute illness, was noticed to be less energetic past few weeks.
- EHS reported BS 6.3, BP 108/65, HR 60, O2 sat 93% RR 8, given O2 by NP, O2 improved to 98% but then patient removed NP as she was confused.

Case #1 – Additional Information

PMHx

- Hypertension
- OA with spinal stenosis Lspine
- Osteoporosis
- Hypothyroidism
- Depression/anxiety
- Left THR
- Cataract surgery bilateral

Meds

- Altace 7.5mg po daily
- Synthroid 88mcg
- Tylenol 1g po tid prn
- Kadian 40mg po daily
- Calcium/vitamin D
- Effexor XR 75 mg po daily

Social History

- Widowed 2 yrs ago
- Retired nurse
- Lives with daughter and son-in-law in a downstairs suite

Case #1 - Labs

Initial Labs:

- **CBC Hgb 110 otherwise normal**
- **INR 1.1**
- **Random glucose 5.4**
- **Na 130**
- **K 4.2**
- **Cl 98**
- **HCO3 23**
- **Anion Gap 10 (3-16 normal)**
- **Serum Osmolality 275 (275-295)**
- **0smolar gap ETOH correct 4 (<10)**
- **Urea 12 (2-9)**
- **Creat 122 (45-110)**
- **GFR 52 (>60)**
- **Initial LFT'S normal**
- **Salicylate <0.11**
- **Tylenol 149**
- **Ethanol <2.2**
- **ECG sinus rhythm RBB (not new)**

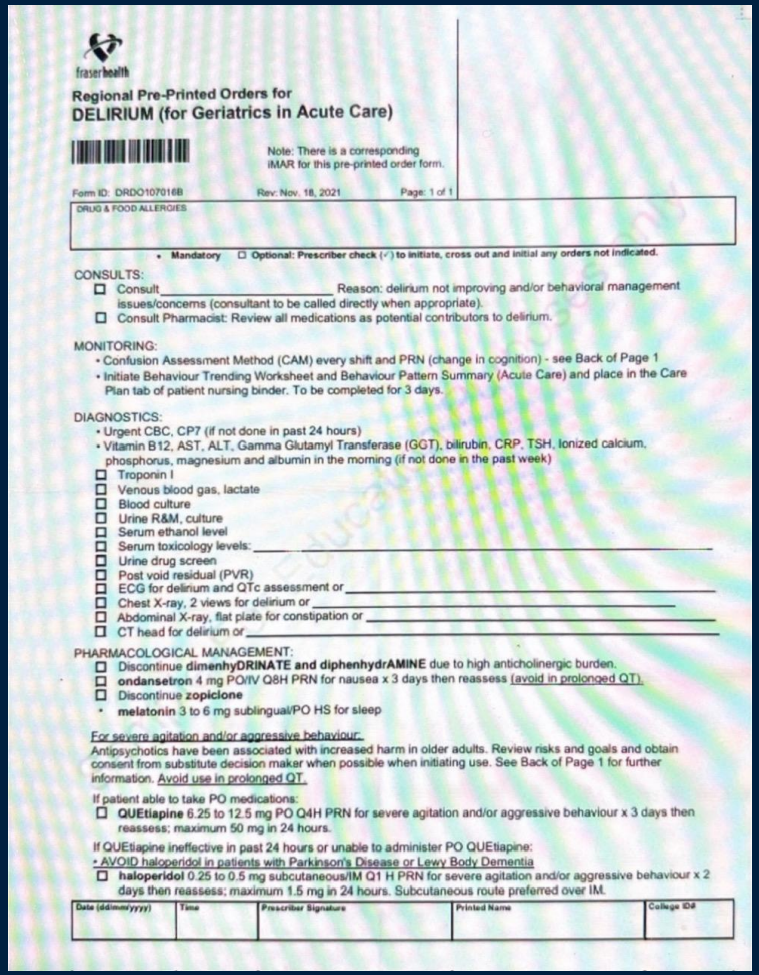
Case #1 - Management

- GCS 13, pinpoint pupils, decreased resps—Narcan given .4mg x 1 dose IV with good effect.

- Poison Control was contacted to review case. Patient was given N-acetylcysteine as per poison control protocol. Labs q6h ordered for liver enzymes, INR and acetaminophen level, ECG (to asses qtc interval-effexor) x 48 hours. Admitted to internal medicine for monitoring on telemetry. Patient initially stable but was intubated and admitted to ICU later afternoon due to decreased LOC GCS 7 despite repeated doses of narcan. Likely effects of Effexor overdose.
- Patient was successfully extubated 48 hours later with a normalization of LFT'S, ECG and back to baseline cognitive function. She reported feeling depressed past few weeks and confirmed overdose was deliberate. She was assessed by psychiatry and ultimately underwent ECT with excellent results.

Case #1 - Management

- Pre-printed order sets (e.g. FHA Delirium for Geriatric Medicine)
- Convenient and standardized
- Common in acute settings
- Can reduce mis-communication due to handwriting or typing errors.
- Needs to ensure you have the most updated version.



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Regional Pre-Printed Orders for
DELIRIUM (for Geriatrics in Acute Care)

Note: There is a corresponding iMAR for this pre-printed order form.

Form ID: DRDO107016B Rev: Nov. 18, 2021 Page: 1 of 1

DRUG & FOOD ALLERGIES

• **Mandatory** ☐ **Optional: Prescriber check (✓) to initiate, cross out and initial any orders not indicated.**

CONSULTS:
- ☐ Consult_____ Reason: delirium not improving and/or behavioral management issues/concerns (consultant to be called directly when appropriate).
- ☐ Consult Pharmacist: Review all medications as potential contributors to delirium.

MONITORING:
- Confusion Assessment Method (CAM) every shift and PRN (change in cognition) - see Back of Page 1
- Initiate Behaviour Trending Worksheet and Behaviour Pattern Summary (Acute Care) and place in the Care Plan tab of patient nursing binder. To be completed for 3 days.

DIAGNOSTICS:
- Urgent CBC, CP7 (if not done in past 24 hours)
- Vitamin B12, AST, ALT, Gamma Glutamyl Transferase (GGT), bilirubin, CRP, TSH, Ionized calcium, phosphorus, magnesium and albumin in the morning (if not done in the past week)

☐ Troponin I
☐ Venous blood gas, lactate
☐ Blood culture
☐ Urine R&M, culture
☐ Serum ethanol level
☐ Serum toxicology levels: _____
☐ Urine drug screen
☐ Post void residual (PVR)
☐ ECG for delirium and QTc assessment or _____
☐ Chest X-ray, 2 views for delirium or _____
☐ Abdominal X-ray, flat plate for constipation or _____
☐ CT head for delirium or _____

PHARMACOLOGICAL MANAGEMENT:
- ☐ Discontinue **dimenhyDRINATE and diphenhydrAMINE** due to high anticholinergic burden.
- ☐ **ondansetron** 4 mg PO/IV Q8H PRN for nausea x 3 days then reassess (avoid in prolonged QT).
- ☐ Discontinue **zopiclone**
- **melatonin** 3 to 6 mg sublingual/PO HS for sleep

For severe agitation and/or aggressive behaviour:
Antipsychotics have been associated with increased harm in older adults. Review risks and goals and obtain consent from substitute decision maker when possible when initiating use. See Back of Page 1 for further information. Avoid use in prolonged QT.

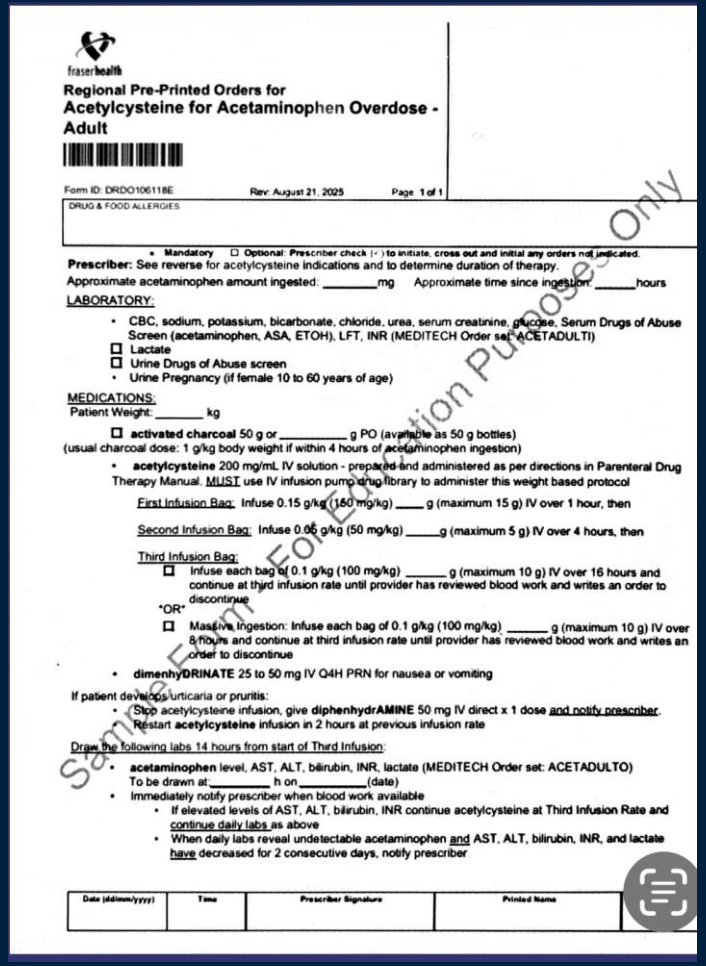
If patient able to take PO medications:
- ☐ **QUEtiapine** 6.25 to 12.5 mg PO Q4H PRN for severe agitation and/or aggressive behaviour x 3 days then reassess; maximum 50 mg in 24 hours.

If QUEtiapine ineffective in past 24 hours or unable to administer PO QUEtiapine:
• AVOID haloperidol in patients with Parkinson's Disease or Lewy Body Dementia
- ☐ **haloperidol** 0.25 to 0.5 mg subcutaneous/IM Q1 H PRN for severe agitation and/or aggressive behaviour x 2 days then reassess; maximum 1.5 mg in 24 hours. Subcutaneous route preferred over IM.

Date (dd/mm/yyyy)	Time	Prescriber Signature	Printed Name	College ID#

Case #1 - Management

- Pre-printed order sets (e.g. FHA Acetylcysteine protocol for Acetamionphen Overdose)



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Regional Pre-Printed Orders for
Acetylcysteine for Acetaminophen Overdose - Adult

Form ID: DRDO106118E Rev: August 21, 2025 Page 1 of 1

DRUG & FOOD ALLERGIES

• Mandatory ☐ Optional. Prescriber check (✓) to initiate, cross out and initial any orders not indicated.

Prescriber: See reverse for acetylcysteine indications and to determine duration of therapy.

Approximate acetaminophen amount ingested: _____mg Approximate time since ingestion: _____hours

LABORATORY:

- CBC, sodium, potassium, bicarbonate, chloride, urea, serum creatinine, glucose, Serum Drugs of Abuse Screen (acetaminophen, ASA, ETOH), LFT, INR (MEDITECH Order set: ACETADULTI)

☐ Lactate
☐ Urine Drugs of Abuse screen

- Urine Pregnancy (if female 10 to 60 years of age)

MEDICATIONS:

Patient Weight: _____ kg

☐ **activated charcoal** 50 g or _____ g PO (available as 50 g bottles)
(usual charcoal dose: 1 g/kg body weight if within 4 hours of acetaminophen ingestion)

- **acetylcysteine** 200 mg/mL IV solution - prepared and administered as per directions in Parenteral Drug Therapy Manual. MUST use IV infusion pump drug library to administer this weight based protocol

First Infusion Bag: Infuse 0.15 g/kg (150 mg/kg) ____ g (maximum 15 g) IV over 1 hour, then

Second Infusion Bag: Infuse 0.05 g/kg (50 mg/kg) _____g (maximum 5 g) IV over 4 hours, then

Third Infusion Bag:

☐ Infuse each bag of 0.1 g/kg (100 mg/kg) _____ g (maximum 10 g) IV over 16 hours and continue at third infusion rate until provider has reviewed blood work and writes an order to discontinue

OR

☐ Massive ingestion: Infuse each bag of 0.1 g/kg (100 mg/kg) _____ g (maximum 10 g) IV over 8 hours and continue at third infusion rate until provider has reviewed blood work and writes an order to discontinue

- **dimenhyDRINATE** 25 to 50 mg IV Q4H PRN for nausea or vomiting

If patient develops urticaria or pruritis:

- Stop acetylcysteine infusion, give **diphenhydrAMINE** 50 mg IV direct x 1 dose and notify prescriber.
- Restart **acetylcysteine** infusion in 2 hours at previous infusion rate

Draw the following labs 14 hours from start of Third Infusion:

- **acetaminophen** level, AST, ALT, bilirubin, INR, lactate (MEDITECH Order set: ACETADULTO)
  To be drawn at: _____ h on _____(date)
- Immediately notify prescriber when blood work available
  - If elevated levels of AST, ALT, bilirubin, INR continue acetylcysteine at Third Infusion Rate and continue daily labs as above
  - When daily labs reveal undetectable acetaminophen and AST, ALT, bilirubin, INR, and lactate have decreased for 2 consecutive days, notify prescriber

Date (dd/mm/yyyy)	Time	Prescriber Signature	Printed Name	

Case #2

- 55yo male presents to UPCC at 3pm with complaints of epigastric and retrosternal chest pain.

- HPI: Pain started approximately at 11am while raking leaves at home. Pain was described as tight and heavy with no radiation. Mild sob, no nausea, no lightheadedness or palpitations. Pain resolved after approximately 20min with rest. Patient went back out to resume raking leaves but stopped and called for his wife as his symptoms returned, lasting 10minutes. Denied prior episodes of chest pain but has felt more tired past few weeks.

Case #1 – Additional Information

PMHx

- Hypertension
- Dyslipidemia
- OA C/L-spine

Medication

- Crestor
- Ramipril
- Tylenol

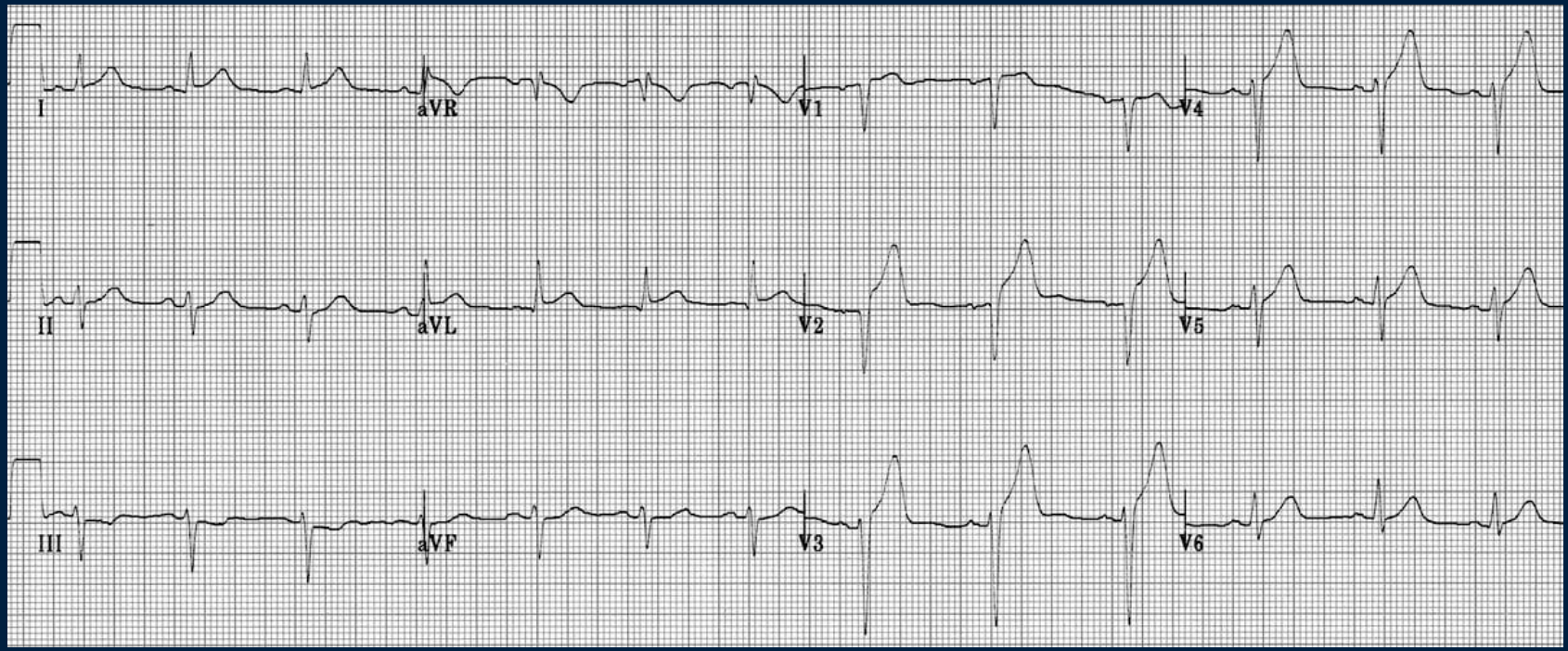
Social history

- Architect
- No smoking history, etoh-2 beers per week
- Not physically active
- Lives independently with wife

Case #2 - ECG

What do you see?

What is your assessment? I.e. Working diagnosis?

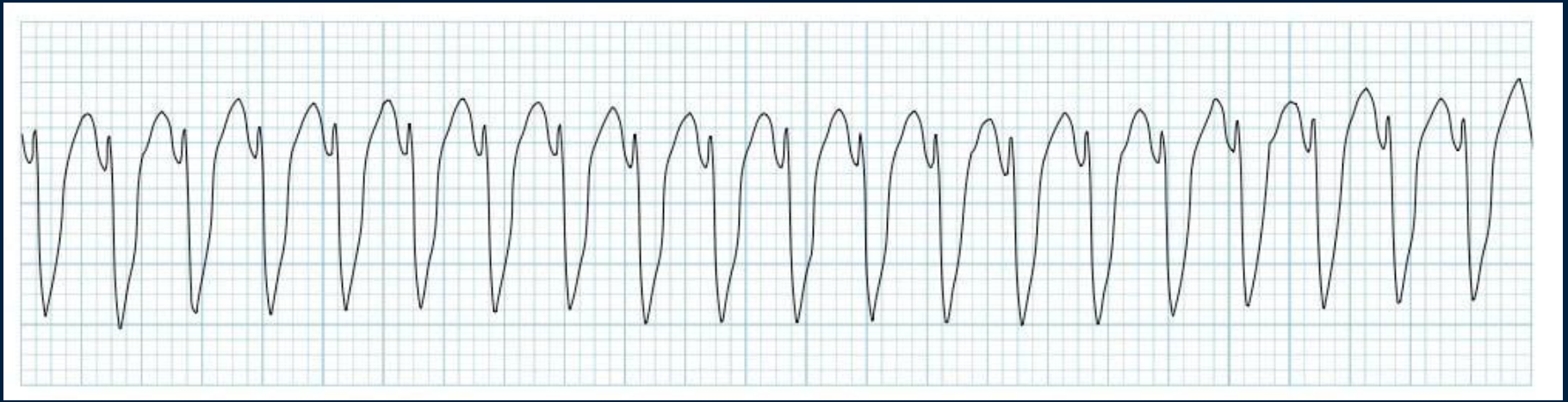


Case #2 - ECG

Now what?

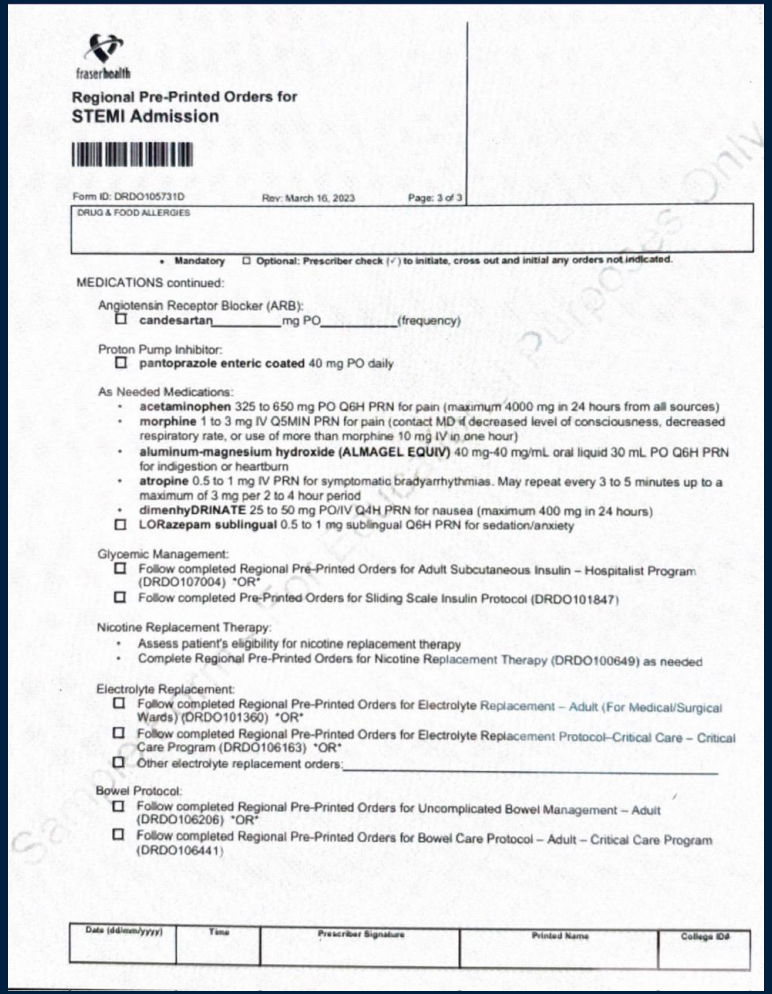
What is your diagnosis?

What will you do next?



Case #2 - Management

- Pre-printed order sets – STEMI Admission protocol
- Likely need to consult Internal Meds/cardiology – cath lab?
- RTVS – RUDI?



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Regional Pre-Printed Orders for STEMI Admission

Form ID: DRDO105731D Rev: March 16, 2023 Page: 3 of 3

DRUG & FOOD ALLERGIES

• Mandatory ☐ Optional: Prescriber check (✓) to initiate, cross out and initial any orders not indicated.

MEDICATIONS continued:

Angiotensin Receptor Blocker (ARB):
☐ **candesartan**_____mg PO_____(frequency)

Proton Pump Inhibitor:
☐ **pantoprazole enteric coated** 40 mg PO daily

As Needed Medications:
- **acetaminophen** 325 to 650 mg PO Q6H PRN for pain (maximum 4000 mg in 24 hours from all sources)
- **morphine** 1 to 3 mg IV Q5MIN PRN for pain (contact MD if decreased level of consciousness, decreased respiratory rate, or use of more than morphine 10 mg IV in one hour)
- **aluminum-magnesium hydroxide (ALMAGEL EQUIV)** 40 mg-40 mg/mL oral liquid 30 mL PO Q6H PRN for indigestion or heartburn
- **atropine** 0.5 to 1 mg IV PRN for symptomatic bradyarrhythmias. May repeat every 3 to 5 minutes up to a maximum of 3 mg per 2 to 4 hour period
- **dimenhyDRINATE** 25 to 50 mg PO/IV Q4H PRN for nausea (maximum 400 mg in 24 hours)

☐ LO**Razepam sublingual** 0.5 to 1 mg sublingual Q6H PRN for sedation/anxiety

Glycemic Management:
☐ Follow completed Regional Pre-Printed Orders for Adult Subcutaneous Insulin – Hospitalist Program (DRDO107004) *OR*
☐ Follow completed Pre-Printed Orders for Sliding Scale Insulin Protocol (DRDO101847)

Nicotine Replacement Therapy:
- Assess patient's eligibility for nicotine replacement therapy
- Complete Regional Pre-Printed Orders for Nicotine Replacement Therapy (DRDO100649) as needed

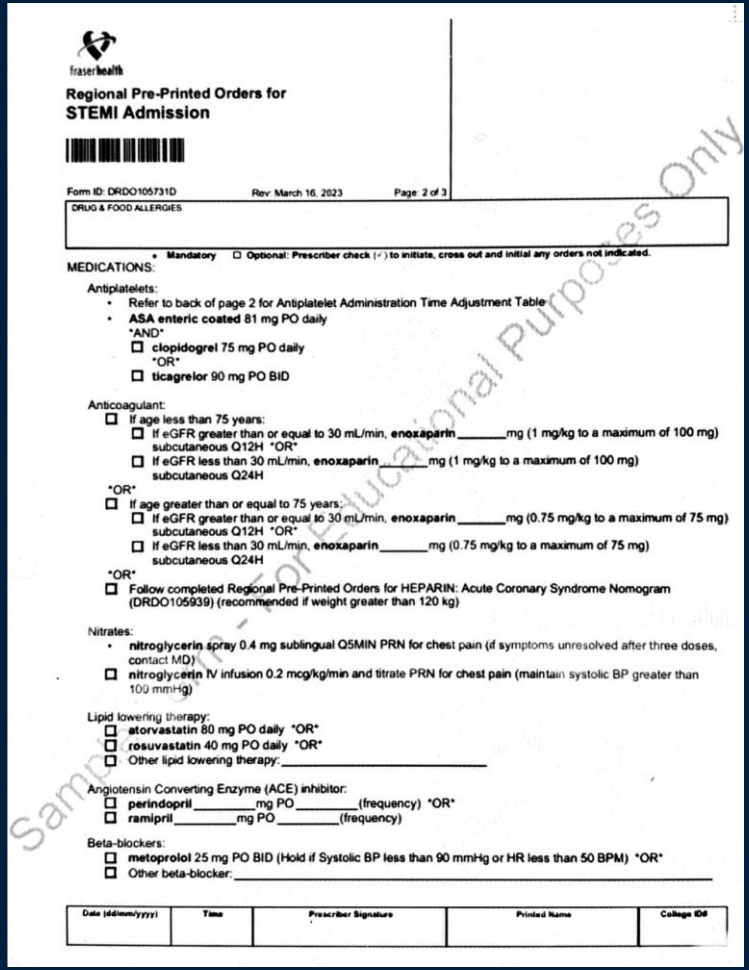
Electrolyte Replacement:
☐ Follow completed Regional Pre-Printed Orders for Electrolyte Replacement – Adult (For Medical/Surgical Wards) (DRDO101360) *OR*
☐ Follow completed Regional Pre-Printed Orders for Electrolyte Replacement Protocol–Critical Care – Critical Care Program (DRDO106163) *OR*
☐ Other electrolyte replacement orders:_____

Bowel Protocol:
☐ Follow completed Regional Pre-Printed Orders for Uncomplicated Bowel Management – Adult (DRDO106206) *OR*
☐ Follow completed Regional Pre-Printed Orders for Bowel Care Protocol – Adult – Critical Care Program (DRDO106441)

Date (dd/mm/yyyy)	Time	Prescriber Signature	Printed Name	College ID#

Case #2 - Management

- Other important things to check:
  - Code status
  - Advanced Care Directives
    - E.g. MOST (Medical Orders for Scope of Treatment)



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Regional Pre-Printed Orders for STEMI Admission

Form ID: DRDO105731D Rev: March 16, 2023 Page: 2 of 3

DRUG & FOOD ALLERGIES

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MEDICATIONS:

Antiplatelets:
- Refer to back of page 2 for Antiplatelet Administration Time Adjustment Table
- **ASA enteric coated** 81 mg PO daily

AND

☐ **clopidogrel** 75 mg PO daily

OR

☐ **ticagrelor** 90 mg PO BID

Anticoagulant:

☐ If age less than 75 years:
- ☐ If eGFR greater than or equal to 30 mL/min, **enoxaparin** _____mg (1 mg/kg to a maximum of 100 mg) subcutaneous Q12H *OR*
- ☐ If eGFR less than 30 mL/min, **enoxaparin** _____mg (1 mg/kg to a maximum of 100 mg) subcutaneous Q24H

OR

☐ If age greater than or equal to 75 years:
- ☐ If eGFR greater than or equal to 30 mL/min, **enoxaparin** _____mg (0.75 mg/kg to a maximum of 75 mg) subcutaneous Q12H *OR*
- ☐ If eGFR less than 30 mL/min, **enoxaparin** _____mg (0.75 mg/kg to a maximum of 75 mg) subcutaneous Q24H

OR

☐ Follow completed Regional Pre-Printed Orders for HEPARIN: Acute Coronary Syndrome Nomogram (DRDO105939) (recommended if weight greater than 120 kg)

Nitrates:
- **nitroglycerin** spray 0.4 mg sublingual Q5MIN PRN for chest pain (if symptoms unresolved after three doses, contact MD)

☐ **nitroglycerin** IV infusion 0.2 mcg/kg/min and titrate PRN for chest pain (maintain systolic BP greater than 100 mmHg)

Lipid lowering therapy:

☐ **atorvastatin** 80 mg PO daily *OR*

☐ **rosuvastatin** 40 mg PO daily *OR*

☐ Other lipid lowering therapy: _____

Angiotensin Converting Enzyme (ACE) inhibitor:

☐ **perindopril** _____mg PO _____(frequency) *OR*

☐ **ramipril** _____mg PO _____(frequency)

Beta-blockers:

☐ **metoprolol** 25 mg PO BID (Hold if Systolic BP less than 90 mmHg or HR less than 50 BPM) *OR*

☐ Other beta-blocker: _____

Date (dd/mm/yyyy)	Time	Prescriber Signature	Printed Name	College ID#

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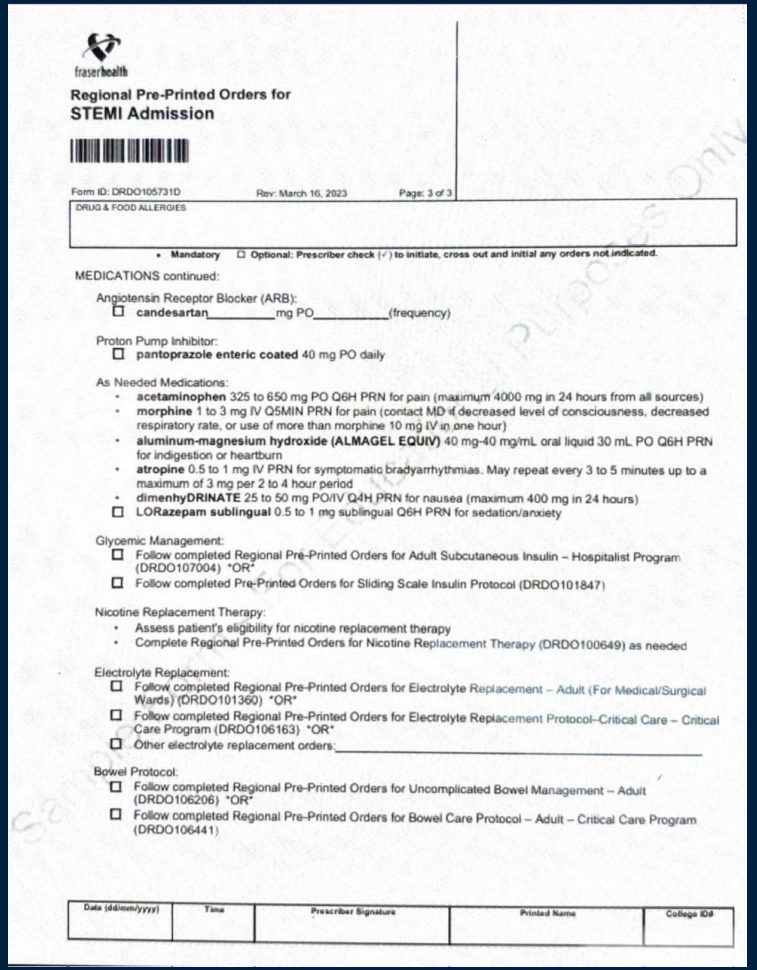

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Date (dd/mm/yyyy)	Time	Prescriber Signature	Printed Name	College ID#

THE UNIVERSITY OF BRITISH COLUMBIA