UNIVERSITY OF ALBERTA

Expanding community pharmacist's roles in Hepatitis C through the use of point-of-care testing

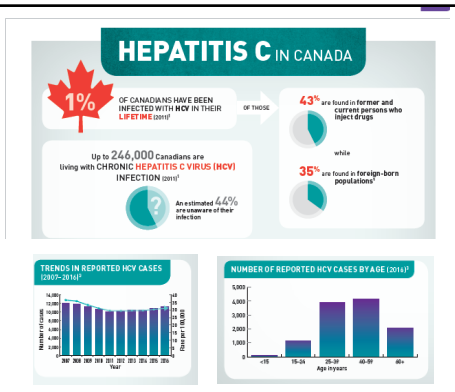
Klaudia Zabrzenski BscPharm, Katherine Kolasa BScPharm – ACE team
Christine Hughes PharmD - Faculty of Pharmacy & Pharm Sciences

"uplifting the whole people"

Objectives

At the end of this session, participants should be able to:

1. Describe the importance of screening for and treating hepatitis C virus (HCV).
2. Discuss benefits and challenges with point-of-care tests in screening for HCV.
3. Discuss pharmacist-led models for screening and treatment of HCV.
4. Outline considerations when implementing point-of-care testing in pharmacy practice.



CCDR Volume 44-7/8: Can we eliminate hepatitis C?

Why screen and treat hepatitis C virus?

- Associated with significant morbidity and mortality – lifetime cost to Canadian health system of $64 000 per chronic infection
- Disproportionately impacts vulnerable populations
- New treatments (DAAs)– safe and effective!!
- Treatment as prevention – population-level prevention (no vaccine available)

O'Neil et al. Can J Public Health (2019).

BLUEPRINT TO INFORM HEPATITIS C ELIMINATION EFFORTS IN CANADA

- **Targets for Canada by 2030:**
  - 80% decrease in new infections
  - 90% of people living with HCV will be diagnosed
  - 80% of people living with HCV will have initiated treatment

Available at: https://www.canhepc.ca/sites/default/files/media/documents/blueprint_hcv_2019_05.pdf

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Priority Populations in Canada

Available at: https://www.canhepc.ca/sites/default/files/media/documents/blueprint_hcv_2019_05.pdf

Who should be tested for HCV (at least once)?

- **Risk behaviors:** IDU (current or ever), intranasal illicit drug use
- **Risk exposures:** persons on long-term hemodialysis, needle stick injuries, children born to HCV-infected women, persons ever incarcerated, recipients of transfusions or organs (especially before 1992), sexual contact or sharing personal care items with someone who is HCV-infected
- **Associated conditions/circumstances:** HIV, solid organ donors, unexplained liver disease/↑ ALT or clinical clues
- **Demographics:** born between 1945 and 1975*, having lived in endemic area (where HCV prevalence > 3%)

*Recommendation by 2018 guideline update from the Canadian Association for the Study of the Liver. CMAJ 2018;190:E677-87.
AASLD-IDSA. Recommendations for testing, managing, and treating hepatitis C. http://www.hcvguidelines.org

Screening- Laboratory Tests

- Serologic screening

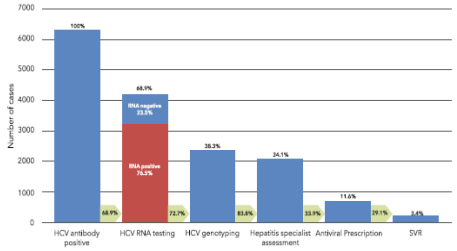
  Step 1:

  Initial screen of HCV antibodies (antibody EIA)
  - Indicates acute, chronic or past infection

  Step 2:

  Qualitative HCV RNA assay (PCR)
  - Positive indicates active disease
  - Negative indicates no active disease (past infection)

Cascade of Care in Alberta (2009-2016)

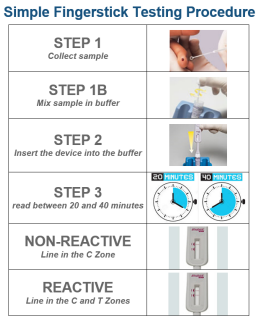


O'Neil et al. Can J Public Health (2019). https://doi.org/10.17269/s41997-019-00234-z

New (and targeted) Approaches Needed

- High proportion not aware they are living with HCV
- Challenges reaching individuals at risk
- Requires partnerships and use of new technology

Rapid Testing – Approved in Canada in 2017



OraQuick HCV

Point of Care Testing - HCV

Advantages

- Easy to perform (capillary blood – finger prick)
- Results available at point of care
- Very good sensitivity and specificity
- Easy to adapt to different practice models and settings
- "Low barrier" for testing

Disadvantages

- Requires bloodwork (HCV RNA) to confirm chronic infection
- Sharing results – not on Netcare
- Patients need to be linked to care
- Patients may be at risk for HIV or other STIs
- Cost of testing

Role of Pharmacists in HCV

- Disease prevention and screening
  - Education/awareness
  - Harm reduction (e.g. clean needles, ODT)
  - Screening
- Treatment

Mohammad et al. Pharmacotherapy 2014;34:1341-54.
Cook C et al. The Pharmaceutical Journal Nov 14, 2017.

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Education of Pharmacy Students

- Basic training on stigma and ways to reduce stigma
- Vulnerable populations
- Hepatitis C- pathophysiology, screening, goals of therapy, and treatment (basics)
- Exposure to point of care testing

IMPLEMENTING NEW PHARMACY SERVICES FOR HEPATITIS C

Hepatitis C Training

INHSU (www.inhsu.org)

- Free online modules
- Face to face workshops with local specialists in hepatitis C care

ECHO Hepatitis C Outreach (Dr. Sam Lee)

- Tailored to supporting rural practitioners
- 2 day training - case workshop, didactic lesson, clinic preceptorship at Calgary UCMC
- Bi weekly video conferencing with mentors to discuss cases

Numerous Online Resources for Independent Learning

- CATIE website training modules (catie.ca)
- Hepatitis C Online modules (https://www.hepatitisc.uw.edu)

Models of Hepatitis C Care

Adherence and Community Engagement (ACE) Team

- Pharmacist-led outreach team
- Focus on HIV-Hep C co-infected patients
- Collaborative care with specialists
- Stabilization, improving adherence, wrap around supports
- Direct hepatitis C referrals
- Testing and treatment of partners

Models of Hepatitis C Care

Shoppers CHOICE Program

- Screening of ODT clients at the pharmacy counter
- Confirmatory lab work and clinical workup
- RPh prescribing and initiation of treatment
- Coupling treatment with opioid substitution therapy
- Follow up monitoring

Models of Hepatitis C Care

Community Pharmacy- Mint Health + Drugs

- 2 inner city community pharmacies
- POCT screening, clinical work up and lab work
- Outreach screening
- RPh initiated hepatitis C treatment
- Incorporated as part of regular care planning

Incorporating Hep C into your Practice

- Educate yourself, get excited!
- Determine patient population of need
- Incorporate patient education and signage for Hep C
- Create connections with specialists to ensure proper referral pathways where needed
- Incorporate screening questions and work up as part of regular CACPs/SMMAs
- Determine need for POCT

Incorporating POCT into your Practice

Key Points for Pharmacists:	Key Points for Licensees
• Only order and initiate POCTs if indicated, appropriate and safe. • Must have a therapeutic relationship with the patient. • Perform only tests for lab work that is not otherwise available (eg. Netcare results). • Obtain informed consent from the patient. • The pharmacist has adequate knowledge of the test, how to perform, interpret and act on the results.	• Know what POCTs are being provided at your pharmacy and who is administering them. • Provide written Standard Operating Procedures for each type of POCT. • Ensure appropriate environment and conditions for testing. • Ensure proper training of staff. • Ensure proper management of equipment and calibration as per manufacturer recommendations • Include a quality assurance process for POCT

https://abpharmacy.ca/sites/default/files/Standards_Lab_POCT.pdf

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The Role of Pharmacy Technicians in POCT

Pharmacy technicians may:	Pharmacists should be involved in:

• Explain the POCT
• Review consent forms
• Perform the actual POCT
	• Pre- and Post- Test Counselling
	• The interpretation and delivery of results to the client
	• Determining necessary next steps:
	  • Collaboration letters to other healthcare providers
	  • Ordering follow-up testing
	  • HCV work-up in anticipation of referral or prescribing for those who have undergone initial training to gain HCV Prescriber status

https://abpharmacy.ca/sites/default/files/Standards_Lab_POCT.pdf

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