



1 When To Test

2 Test/s, Results and Actions

Clinical Indicators

- Abnormal liver function tests (LFTs) (males, ALT ≥ 30 U/L; females, ALT ≥ 19 U/L)
- Jaundice

Presence of Risk Factors

- Injecting drug use (current/ever)
- Sharing of drug use equipment
- Born between 1945-1975
- Born in high prevalence region[^]
- Blood transfusions, blood products and organ transplant before 1992 in Canada
- Unsterile tattooing/body piercing
- Unsterile medical/dental procedures/blood transfusions in high prevalence countries
- Time in prison
- Needlestick injury
- Mother to child transmission
- Sexual transmission in men who have sex with men (MSM)
- Sexual transmission in those who are HIV positive
- Receiving hemodialysis

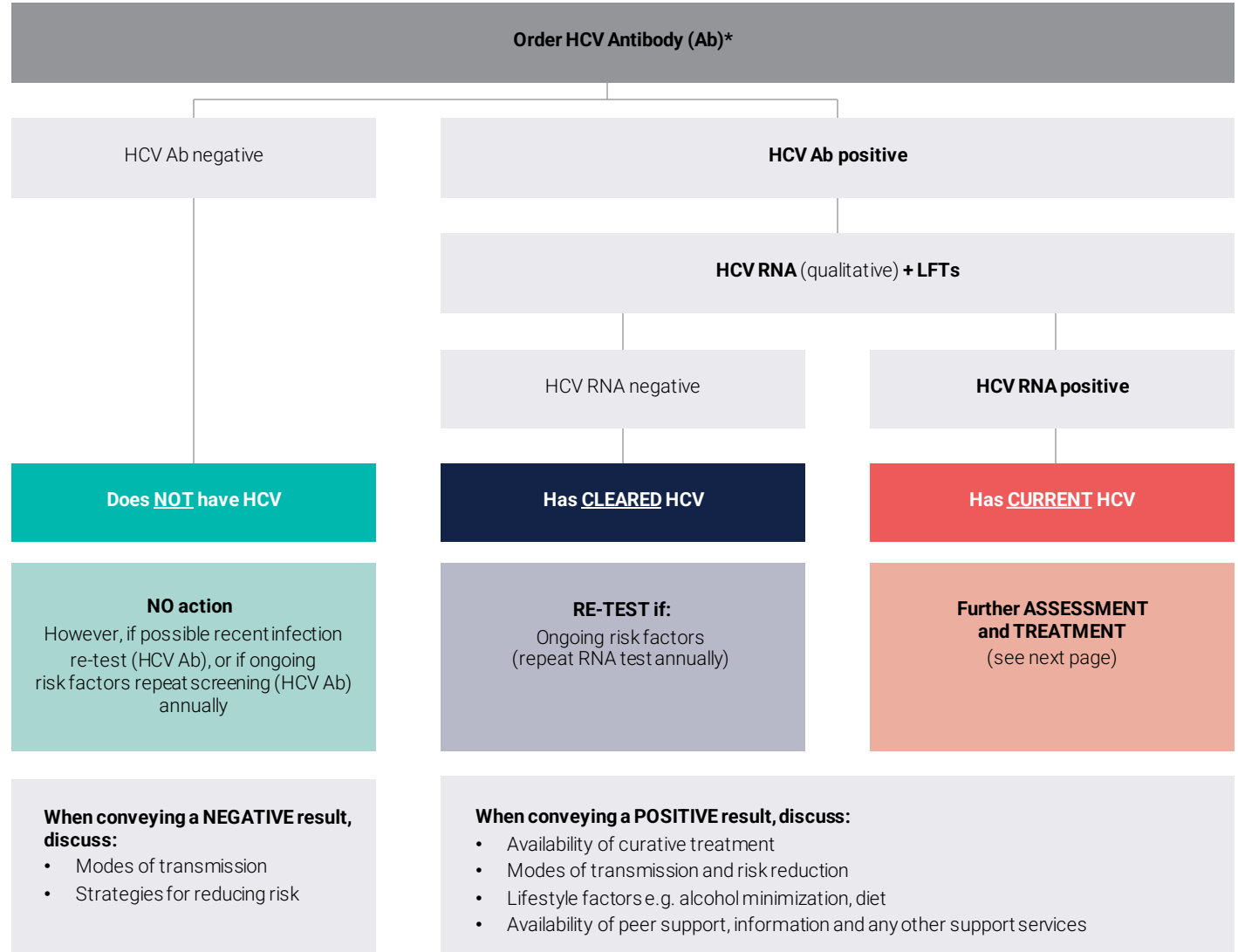
[^]Africa, the Middle East (in particular Egypt), the Mediterranean, Eastern Europe, and South Asia

Other

- Initiating PrEP
- When someone requests a test

When gaining informed consent before testing, discuss:

- Reason for test
- What a positive antibody result means
- Next steps if antibody positive
- Availability of curative treatment




3 Pre-Treatment Assessment


Baseline screening after positive HCV PCR

- Complete Blood Count (CBC)
- Urea, electrolytes, creatinine
- AST, ALT, GGT, ALP, Tbil, Dbil, INR, Alb


Assess liver fibrosis: cirrhotic status

- Signs of chronic liver disease (spider naevi, palmar erythema, jaundice, encephalopathy, hepatomegaly, splenomegaly, ascites, peripheral oedema)
- Non-invasive assessment of fibrosis: 
 - Serum biomarkers such as APRI (<1.0 means cirrhosis unlikely). Calculator available: hepatitisc.uw.edu/page/clinical-calculators/apri
 - Elastography assessment e.g. FibroScan® (>12.5 kPa consistent with cirrhosis)
 - Ultrasound assessment


Check for other causes of liver disease

- Check for viral coinfection: 
 - HIV Ab
 - Hepatitis A – check hep A IgG; vaccinate if negative
 - Hepatitis B – check HBsAg, anti-HBc and anti-HBs; vaccinate if all negative
- Heavy alcohol intake
- Fatty liver disease - check weight, BMI

Check for other major co-morbidities

- Renal impairment (eGFR < 50) 

Review previous HCV treatment

- Choice/length of treatment may be influenced by prior HCV treatment experience/response 

Consider pregnancy and contraception

- HCV treatment not recommended for use in pregnant or lactating women

4 Treatment

Is your patient likely to have cirrhosis?
(APRI > 2 or FibroScan® > 12.5)

- Yes No

Consider discussion with, or referral to experienced HCV treater

Has your patient received previous treatment for HCV?

- Yes No

Consider discussion with, or referral to experienced HCV treater

Treatment	Dosage	Duration if no cirrhosis present
SOF/VEL [™] (Epclusa [®])	400/100 mg Once-daily (1 pill, +/- food)	12 weeks
GLE/PIB [™] (Maviret [®])	100/40 mg per pill Once-daily (3 pills, + food)	8 weeks

- Check for drug-drug interactions at hep-druginteractions.org
- Consult your provincial drug plan for coverage

[™]SOF/VEL = Sofosbuvir/Velpatasvir ; GLE/PIB = Glecaprevir/Pibrentasvir

Disclaimer: Guidance provided on this resource is based on best-practice at the time of publication. This quick-reference guide is not intended to be a comprehensive list of all available options.

5 Monitoring

Monitoring while on treatment

- Generally not required, but approach should be individualized
- Side effects of HCV treatment are generally minimal
- Consider monitoring adherence

12 weeks post treatment

- HCV RNA to confirm cure (sustained virological response SVR12 = cure)
- Liver enzymes

6 Follow Up

If your patient has:

No cirrhosis and normal liver enzyme results (males, ALT < 30 U/L; females, ALT < 19 U/L)
No clinical follow-up for HCV required

Ongoing risk factors

Annual HCV RNA test. If re-infected offer re-treatment. Offer education on harm reduction strategies

Abnormal liver enzyme results

(males, ALT ≥ 30 U/L; females, ALT ≥ 19 U/L) Evaluate for other causes of liver disease and refer to specialist for review

Cirrhosis

Refer to specialist. Patients with cirrhosis require long-term monitoring:

- 6-monthly abdominal ultrasound (hepatocellular carcinoma screening)
- Consideration of screening for esophageal varices

CONSULT WITH A SPECIALIST IF:

Pre-treatment

- Cirrhosis is present or likely – APRI ≥ 2 and elastography score not available; elastography > 12.5 kPa
- Coinfected with HIV or HBV
- Renal impairment (eGFR < 50)
- Prior treatment failure of HCV treatment
- Complex drug interactions
- Complex co-morbidities

- Not comfortable prescribing HCV treatment

During treatment

- Major medication side effects

Post treatment

- RNA positive 12 weeks post treatment
- Abnormal liver enzymes at SVR12