### Hepatitis B Management – Quick Reference Guide

#### Screening
- **Individuals born in areas with HBV prevalence >2%** (including: Africa, Asia, Eastern and Southern Europe, Asian-Pacific Islands, areas of Central and South America and the Caribbean) and indigenous peoples
- Persons starting immunosuppressive therapy (particularly cancer chemotherapy), or renal dialysis
- All pregnant women
- Persons infected with hepatitis C or HIV
- Individuals with chronically elevated ALT or AST of unknown origin
- Children, household and sexual contacts of HBsAg-positive persons
- Inmates of correctional facilities
- Persons who have ever injected drugs
- Persons with multiple sexual partners or history of sexually transmitted disease
- Men who have sex with men
- Needle stick injuries

#### Testing

### Chronic Hepatitis
- **HBsAg**
  - Positive HBsAg denotes infection with hepatitis B
  - Two positive HBsAg ≥ six months apart is chronic hepatitis B

### Immune Status/Previous Exposure
- **anti-HBs**
  - May be positive from previous infection or from immunization.
  - Check HBsAg at least once in those with risk factors to rule out chronic HBV infection

#### Initial Work-Up
- Labs: CBC, AST, ALT, bilirubin, albumin, creatinine, INR
- Tests of HBV replication: HBeAg, anti-HBe, HBV DNA viral load
- Rule out viral coinfection: hepatitis C (anti-HCV), HIV (HIV serology)
- Screening: abdominal ultrasound

#### Routine Follow-Up
- Counsel on the prevention of HBV transmission – Call TPH to access vaccine for contacts or for assistance with counselling
- Provide advice to reduce liver damage and medication considerations with cirrhosis
- Follow HBV DNA and ALT every 6–12 months
- Hepatocellular Carcinoma (HCC) Screening every 6 months with abdominal ultrasound for men >40 years old (>20 if African descent), women >50 years old, and those with cirrhosis of any age. HCC may occur in the absence of cirrhosis.

#### Referral
- Reasons for referral to specialty care*:
  - Age >40 years old with positive HBV DNA
  - Elevated ALT (men >30 U/L, women >20 U/L)
  - Evidence of cirrhosis (e.g., low platelets, splenomegaly, hepatic mass or portal hypertension)
  - If HBeAg Positive
  - If HBeAg Negative, with HBV DNA viral load > 2,000 IU/ml
  - Any HBsAg positive patient starting immunosuppressive therapy (even if normal ALT and negative HBV DNA)

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HBsAg – hepatitis B surface antigen; anti-HBs – hepatitis B surface antibody; HBeAg – hepatitis B e antigen; anti-HBe – hepatitis B e antibody

*Referral to specialty care may be a hepatologist, gastroenterologist, infectious disease specialist, or a family physician with experience in HBV management.

Quick Reference prepared by Toronto Public Health in consultation with Dr. Jordan Feld and Dr. Meb Rashid

References:
Ontario Association of Medical Laboratories. Guidelines for ordering diagnostic testing for viral hepatitis. September, 2010