



# Acute and Chronic Hepatitis B in Canada, 1999

## Enhanced Hepatitis Strain Surveillance System (EHSSS)

Enhanced surveillance of acute hepatitis B virus (HBV) and hepatitis C virus (HCV) was initiated in 1998 to obtain a more accurate assessment of current infection levels as well as support the development of evidence-based prevention and control programs for hepatitis B and C. As of June 2002, the enhanced surveillance has been successfully integrated with the Viral Hepatitis Strain Surveillance System of the Canadian Science Centre for Human and Animal Health, National Microbiology Lab. This integration of epidemiologic and laboratory sciences allows for

the comprehensive surveillance of newly acquired cases of viral hepatitis B and C in Canada. The EHSSS was developed to enhance local public health surveillance needs for hepatitis B and C and to complement reportable data captured through the National Reporting System. Data were initially derived from four sites, and are currently derived from eight sites representing approximately 27% of the total population of Canada. These sites contribute data on acute and chronic hepatitis B and C infections, risk factors associated with infection and viral hepatitis genotype information.

### Recommended Citation

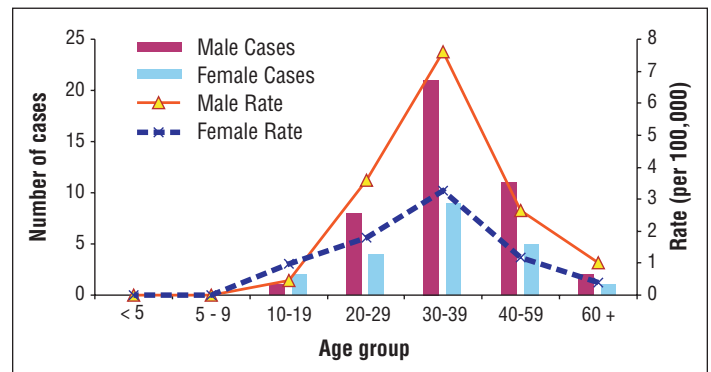
Acute and Chronic Hepatitis B in Canada, 1999, Enhanced Hepatitis Strain Surveillance System, Bloodborne Pathogens Section, Health Care Acquired Infections Division, Health Canada.

Four Health regions include: Capital Health, Edmonton AB, Calgary Regional Health Authority, Calgary AB, Manitoba Health, Winnipeg MN, and Ottawa-Carlton Health Department, Ottawa ON

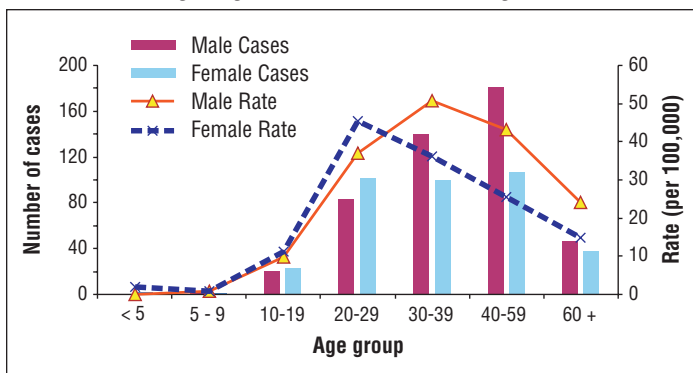
Enhanced surveillance for newly identified hepatitis B virus infections in four health regions, 1999

Characteristic	Acute		Chronic	
	Number	Percentage	Number	Percentage
<b>Age Group (year)</b>				
< 5	0	0.0	2	0.2
5-9	0	0.0	2	0.2
10-19	3	4.7	44	5.2
20-29	12	18.7	185	21.9
30-39	30	46.9	240	28.4
40-59	16	25.0	288	34.0
60+	3	4.7	85	10.1
<b>Sex</b>				
Male	43	67.2	473	55.9
Female	21	32.8	373	44.1

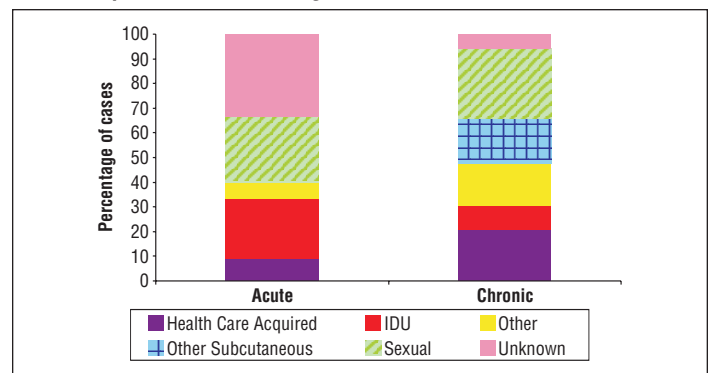
Incidence of acute hepatitis B according to age and sex in four health regions, 1999



Identification of chronic or like chronic hepatitis B according to age and sex in four health regions, 1999



Distribution of mutually exclusive risk factor groups for acute and chronic hepatitis B cases among those who have been interviewed, 1999



**Health Care Acquired** includes Blood Transfusion, receipt of blood product, hemodialysis, hospitalization, history of surgery, organ transplant, history of dental visit; **Other Subcutaneous** includes tattooing, body piercing, acupuncture; **Sexual** includes heterosexual partners >2, MSM, sex with hepatitis B carrier; **Other** includes drug snorting, blood contact, hepatitis B carrier in family, institution associated, incarceration.

### Acute HBV Case Definition

1. Discrete onset of clinical symptoms; **and** 2. Serum aminotransferase levels 2.5 times the upper limit of normal; **and** 3. HBsAg positive or IgM anti-HBc positive (if done); **and** 4. IgM anti-HAV negative (if done); **or** 5. Seroconversion within 12 months

**Likely Acute:** Does not have symptoms or elevated ALT/AST but is IgM anti-HBc positive