



# Quick Stats

## INCIDENCE

### DEFINITION

Incidence refers to the frequency of a new health- or disease-related event. The **incidence rate** expresses the frequency of new events in a particular population for a specified time period.

### CALCULATING AN INCIDENCE RATE

$$\text{Incidence Rate} = \frac{\text{\# of new cases of a disease in a specified time period}}{\text{population at risk for the disease in a specified time period}}$$

The incidence rate calculated using the formula above should be multiplied by a factor of ten in order to express it as a whole number. For example, a rate of 0.00025 would be multiplied by 100,000 and expressed as 25 per 100,000.

### PEEL PUBLIC HEALTH EXAMPLE

The table below provides data on incident (i.e., new) cases of Hepatitis B in Peel and Ontario for the years 2006 through 2010.

#### HEPATITIS B

INCIDENCE OF HEPATITIS B, PEEL AND ONTARIO, 2006-2010				
Year	Number of Cases	Peel Crude Rate per 100,000	Peel Age-Standardized Rate per 100,000	Ontario Age-Standardized Rate per 100,000
2006	14	1.2	1.2	1.4
2007	8	0.6	0.7	1.3
2008	3	0.2	0.3	1.1
2009	12	0.9	0.9	1.1
2010	3	0.2	0.2	N/A

N/A = Data not available.

Note: Age-standardized rate is standardized to the 1991 Canadian population.

Sources: iPHIS 2006-2010, Peel Public Health.

Population estimates 2006-2009 and projections 2010, IntelliHEALTH, Ontario Ministry of Health and Long-Term Care.

### READING THE TABLE:

“Number of Cases” column – the number of new cases of Hepatitis B in Peel in each year



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“Peel Crude Rate per 100,000” column – the rate of new cases of Hepatitis B each year per 100,000 people who lived in Peel that year. For more information, please see the **Epi Quick Tips** on crude rates.

“Peel Age-Standardized Rate per 100,000” column – the hypothetical rate of new Hepatitis B cases in Peel *if* Peel had the same age distribution as the 1991 Canadian population. For more information, please see the **Epi Quick Tips** on standardized rates.

“Ontario Age-Standardized Rate per 100,000” column – the hypothetical rate of new Hepatitis B cases in Ontario *if* Ontario had the same age distribution as the 1991 Canadian population. For more information, please see the **Epi Quick Tips** on standardized rates.

## INTERPRETATION OF THESE DATA:

- There were three new cases of Hepatitis B diagnosed in Peel in 2010.
- In 2010, there were 0.2 new cases of Hepatitis B for every 100,000 people who lived in Peel.

## VISUAL REPRESENTATION OF INCIDENCE:

In this diagram, incident cases are represented by the flow of water into the bathtub (the new cases of the disease or condition). Prevalent cases are represented by the level of water in the bathtub (i.e., the number of cases of the disease or condition that have occurred in the population).

