Better Health for All Series 4
Bloodborne and Sexually Transmitted Infections
About the Data

Definitions

Selected Risk Definitions

- Sex with a known STI case: Sexual contacts of individuals with STI infection are commonly tested and treated as part of standard contact tracing follow up. The risks of these contacts once they become cases is "sex with a known STI case" and does not infer the individual was aware their partner had an STI at the time of intercourse.
- Spent time in Jail (Proxy): incarceration is a proxy for other high risk behaviours.
- Sexual Contact with Confirmed Case: risks for contacts to cases who are tested as part of contact tracing and found positive as above (sex with a known STI case).

Co-infectivity

- HIV was reported non-nominally until 2009. After 2009 individuals with HIV can be linked to hepatitis C reports since 2005, including the case status of confirmed, previously reported and cases transferred and counted in other Health Regions. This does not completely capture hepatitis C status that was reported elsewhere or earlier than 2005, so the hepatitis C co-infection percentage published here should be considered an underestimate.
- Tuberculosis co-infection includes only infection reported after or at the same time as HIV infection was reported. It does not include tuberculosis that was reported in another Health Region and therefore should be considered an underestimate.

HIV Mortality

- Population and Public Health receives notification of death for HIV and AIDS. Causes of death in HIV infected individuals are often complex, and contributing factors may be incompletely reported. The metrics presented here do not attempt to differentiate if HIV infection was a contributing factor.
- Age at mortality is reported by the age at which individuals were first reported, not age at death.

Risk frequencies

- Information about risk exposures are self-reported in Saskatchewan. For infections other than HIV, risk frequencies are reported by the number of times the risk was reported over the years stipulated. Risk categories are those listed verbatim in PHIS. Multiple risks are reported for the same individuals where numbers (frequency) is presented. HIV is reported by primary risk only. The primary risk is determined by a hierarchy of risks and assigns the most likely route of transmission, for example, where an individual reports both heterosexual sex and injection drug use, the most likely route of transmission is injection drug use.

Calculations

Crude rates are presented. Case counts are divided by covered population and multiplied by 100,000. Regional rates are based on case counts by encounter date (lab reported date) divided by Covered Population. Cases with confirmed case status only are counted. Residence at time of testing is used to assign the Regional Health Authority who reports and follows up the case. The Ministry of Health reviews STIs and hepatitis C cases to ensure no double counting occurs between Regional authorities.

Sources

- PHAC – Public Health Agency of Canada. Provincial and national rates are latest available metrics from Notifiable Diseases On-Line. http://dsol-smed.phac-aspc.gc.ca/dsol-smed/ndis/index-eng.php#top_list
- Infectious syphilis rates are obtained from Sexually Transmitted Infections in Canada 2010: http://publications.gc.ca/collections/collection_2013/aspc-phac/HP37-10-2010-eng.pdf
- iPHIS – Public Health Information System, (Saskatchewan Ministry of Health reportable disease database). Source of covered population: Saskatchewan Ministry of Health.

Limitations

Case counts and rates do not include First Nations individuals living on reserves at the time of testing. These cases are reported to FNIH (First Nations & Inuit Health). Covered populations include Reserve populations, however these numbers are not removed from the population estimates, as many individuals registered on reserve live off-reserve at the time of testing. This may result in a very slight underestimate of true rate of infection.

In 2011 the Region changed annual counts to counts by encounter date for STIs from counts by diagnosis status date, used in previous years. This may result in slight changes in annual counts given in previous reports. Occasionally cases reported in a given year are found to belong to another RHA or vice-versa; this can also result in a change of annual counts of cases.

In 2011 significant changes were made to the risk categories in iPHIS, including inactivations of formerly used risk categories, making this data unavailable in data extracts. This may result in miscounts of risk frequencies for some STIs before 2011.

Interpretation of rates

Factors influencing the testing, diagnosis and reported rates include physician screening practices and testing methods, patient access to testing, education and awareness of symptoms and risks, competing priorities of daily life. The upward trend of STIs nationally and internationally since the 1990s in part reflects the expansion of screening efforts and increased use of more sensitive diagnositic tests as well as an actual increase in infections (Centers for Disease Control and Prevention: http://www.cdc.gov/std/stats05/trends2005.htm accessed July 2014).

References

Catie (2013). The epidemiology of HIV in Canada. CATIE 2014 [cited 2014 July 15]; Available from: URL: http://www.catie.ca/en/fact-sheets/epidemiology/epidemiology-hiv-canada