Guidelines for Geographic Attribution of Communicable Disease Cases for Surveillance Reporting Purposes: Who Reports What?

Rationale

Dialogue between program areas at BCCDC and between BC and Yukon surveillance counterparts have highlighted the lack of standard rules for geographic assignment of cases for surveillance purposes. As such, current counts do not construe the same meaning across all diseases. Most often, CD cases are reported based on geographic residence, but historically some diseases have been reported based on where the service is provided. Apart from these inconsistencies, there has also been lack of clarity about which province/territory should report a given case federally, if place of residence and place of service occur in different jurisdictions.

A brief environmental scan has determined that there are limited guidelines available from PHAC on this subject (page 7, Case Definitions for Diseases under National Surveillance, 2009). Guidelines in use in the United States (11-SI-04 Revised Guidelines for Determining Residency for Disease Notification Purposes, US CDC Atlanta) were taken into consideration when developing the principles below.

The purpose of notifiable disease reporting is to reflect the incidence of disease within the BC population and changes in these trends over time. This population should reflect those to which public health provides ongoing programs and public health interventions since an important function of surveillance is to monitor burden of disease within the BC population and program effectiveness. The purpose is not necessarily to reflect all disease that may be acquired or transmitted within BC, nor to accurately reflect exposure location which may not be able to be determined in many cases.

The following attribution rules have been developed with input from Yukon Communicable Disease Control and program areas of BCCDC. The aim of these guidelines is that all cases should be reported, but no case should be reported by multiple jurisdictions.

Uses of notifiable disease data, collected according to the following attribution rules, include reporting to PHAC and inclusion in provincial publications. The rules also inform communication of communicable disease reports between provinces/territories. The use of these rules to define surveillance counts does not in any way restrict additional analyses from being performed to examine population groups served by specific clinics or services (i.e. by care provider).

Attribution Rules

BC residents

Geographic attribution of a case for surveillance purposes is by their residential address (permanent residence). This applies even if the individual was traveling within or outside the province when they became infected, and if their workplace address or mailing address is in an area different from their residential address. Attribution is not done on the basis of a person’s health insurance status, existence of a BC PHN or BC First Nations status card as such identification can be retained even though a person has moved.

Since notifiable disease data are often combined with population data, case notification guidelines based on residence rules rather than place of service will contribute toward greater consistency in the numerator and denominator data used in disease rates.
Guidelines for Geographic Attribution of Communicable Disease Cases for Surveillance Reporting Purposes: Who Reports What?

Visitors to BC
Visitors to BC are excluded from Provincial counts. This includes travelers visiting BC temporarily for holiday, business or family reasons (e.g. summer vacation, summer camp, adventure hiking/fishing, one-time business trip). Case details should be notified back to the case’s jurisdiction of residence for reporting purposes.

Special circumstances
There may be circumstances where geographic determination for reporting purposes is not clear cut. The following describe common scenarios encountered and the jurisdiction to which such cases should be assigned.

1. Individuals with multiple residences may be included in BC counts
   a. Commuters should be reported by the case’s jurisdiction of permanent residence.
      i. If case’s permanent residence is not BC, exclude case from surveillance counts; notify report to jurisdiction of permanent residence.
   b. Temporary residents (e.g. temporary workers, snowbirds, students attending BC educational institutions, refugee claimants) should be reported by the jurisdiction where they have established temporary residence at the time of diagnosis.
      i. If not BC, exclude case from surveillance counts; notify report to the jurisdiction where they have established temporary residence at the time of diagnosis.
   c. Staff/residents of institutional facilities (e.g. correctional facilities, nursing homes, hospitals or other institutions) should be reported by the jurisdiction where the individual lives and sleeps most of the time.
      i. If not BC, exclude case from surveillance counts; notify report to the case’s province/territory of residence.

2. Newborns
   a. Notifiable diseases in newborn babies who have not yet been discharged following delivery should be made by the jurisdiction of the mother’s usual residence. In cases of adoption, reporting should be done by the jurisdiction of the adoptive parents’ residence.

3. Address unknown
   a. When specific address is unknown or the client has no fixed address, case is attributed to the jurisdiction of the ordering provider.

In all cases, regardless of where the case will be assigned for surveillance and reporting purposes, notification to another jurisdiction may be warranted if additional public health action is necessary (e.g. investigation of source, contact tracing activities, prophylaxis). It should be clear when such communications are conducted where the case is being counted so as to avoid duplicate notifications to the Public Health Agency of Canada.

---

3 Commuters are individuals with multiple addresses (e.g. a permanent address in one jurisdiction and temporary address(es) in another jurisdiction where they reside for the work requirement). The commuter has not established residency in the location where they are working but has a regular requirement to be in that jurisdiction, resulting in frequent travel back and forth.

3 Students at BC institutions contribute to the resident BC population for whom we provide public health services, and among whom we measure success of public health interventions. They are thus counted as BC cases (numerator); however BC statistics does not include students in the BC population denominator. The impact on rate calculations is considered negligible.
For cases presenting with circumstances not clearly fitting the above, BC should confer with the jurisdiction of the client’s permanent residence to determine where the case will be reported. In the absence of national standards for geographic assignment of cases for surveillance purposes, conflicts may arise occasionally between the BC case attribution rules and those used by another jurisdiction. In such cases, the overriding consideration is to avoid duplicate counting of the case, even if this may occasionally mean violating BC’s case attribution rules.