# Agranulocytosis (Neutropenia) Associated with Levamisole in Cocaine in British Columbia: Reporting for Surveillance and Study Purposes

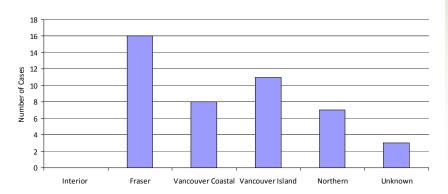
#### Background

Public Health in British Columbia continues to receive reports of agranulocytosis related to levamisole tainted cocaine. Levamisole, a frequent additive in cocaine, is known to cause agranulocytosis in cocaine users. There is a study underway to investigate the epidemiology of levamisole induced-agranulocytosis in BC.

### **Epidemiology**

As of March 2011, 45 cases have been reported by physicians throughout BC. There are more females being affected, as well as more First Nations than other ethnic groups. There have likely been many more unreported cases.

Number of Reported Cases by Health Authority (n=45)



#### Clinical

Suspect in persons with cocaine use and signs of infection: skin abscess, pneumonia, fevers, etc. which develop or progress rapidly

Diagnostic tests: Urgent CBC and differential to identify neutropenia.

Suggested management: If neutrophil count is <1.0 and patient is febrile with an active infection, the patient will require urgent hospital admission and referral to haematologist. Perform infectious work-up including blood cultures, administer broad spectrum antibiotics (e.g. Piperacillin/Tazobactam, Imipenem or Ceftazidime).

Filgastrim (G-CSF) should not be started until after consultation with haematologist. Recovery generally occurs in 7-10 days, but monitor closely. Recurrence is common and neutropenia may recur in about half of cases when reexposed.

## Help Us by Reporting

If you suspect that one of your patients may have agranulocytosis secondary to cocaine contaminated by levamisole, please complete a provincial reporting form (available at http://www.bccdc.ca/cocaine) and fax it the BCCDC at 604-707-2516. Please report both first-time and repeat episodes. Thank you.