



First Nations Health Authority
Health through wellness

Association between toxic drug events and brain injury

In April 2016, a public health emergency was declared in British Columbia (BC) due to the rapidly increasing number of deaths related to toxic drugs. Between 2015 and 2019, around 30,000 people experienced non-fatal toxic drug events. During that time, clinical reports identified brain injuries resulting from toxic drug use as a health concern.

Context



Non-fatal toxic drug events can result in brain injury



Impaired coordination, concentration, speech and vision can result from a non-fatal toxic drug event



Symptoms can appear up to 3 weeks after the toxic drug event, but patients are discharged within 24-28 hours

Findings



Among people with brain injury, 14.6% had one or more toxic drug events



Males over 40 years of age with a pre-existing mental illness are at increased risk of brain injury after a toxic drug event



People who experience a toxic drug event are 15.3 times more likely to have brain damage compared to people who did not

Interpretation



Undetected brain injury can affect decision-making ability, therefore increasing the likelihood of future toxic drug events



Brain injuries can make it more difficult to find housing, jobs, support and cope with the stigma of drug use



It is vital to create services to screen for and detect brain injuries among those experiencing toxic drug events