Health Canada Santé Canada

Canada

Implementation of the Transfusion Transmitted Injuries Surveillance System (TTISS) in Canada

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A collaborative project of the Division of Blood Safety Surveillance and Health Care Acquired Infections, Health Canada; Ottawa, ON[1]; Unité de recherche en hémovigilance, Montréal, QC[2]; Provincial Blood Coordinating Office, Vancouver, BC[3]; Nova Scotia Department of Health, Halifax, NS[4]; Provincial Blood Coordinating Program, Halifax, NS[5]; Department of Health and Social Services, Charlottetown, PE[6]

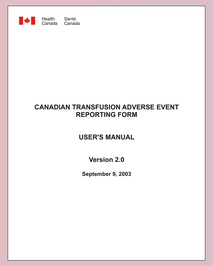
Background

- **Late 1970s through to the 1980s:** Transfusion-transmitted infections occurred
- **November 1997:** "Krever" Commission of Inquiry on Blood Safety, Final Report
- **March 1998:** Surveillance and Epidemiology of Transfusion (SET) working group formed
- **November 1998:** Blood Safety Surveillance and Health Care Acquired Infections Division formed to carry out surveillance aspects of blood safety programs
- **March 1999:** Federal authorities requested the ten Provinces and three Territories to submit proposals for funding
- **November 1999 to March 2002:** Four provinces participated in the Pilot TTISS Project to develop & implement transfusion adverse event reporting system in Canada.
- **April 2002 – present:** National implementation of TTISS

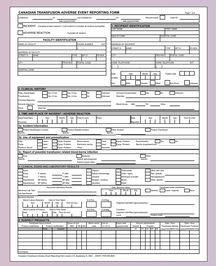
Goals

- Monitor trends in known risks
- Assess the magnitude of new or emerging risks
- Monitor the effectiveness of actions taken to reduce risks
- Explore, investigate and respond to potential problems
- Contribute to the reduction of the risk of transfusion/transplantation related blood-borne pathogens and injuries in Canada

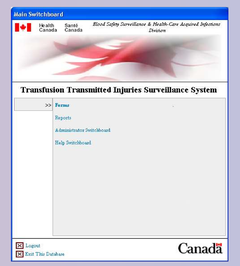
Manual



Reporting Form

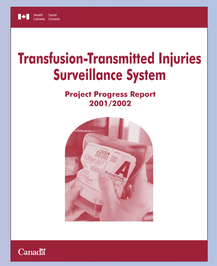


Database

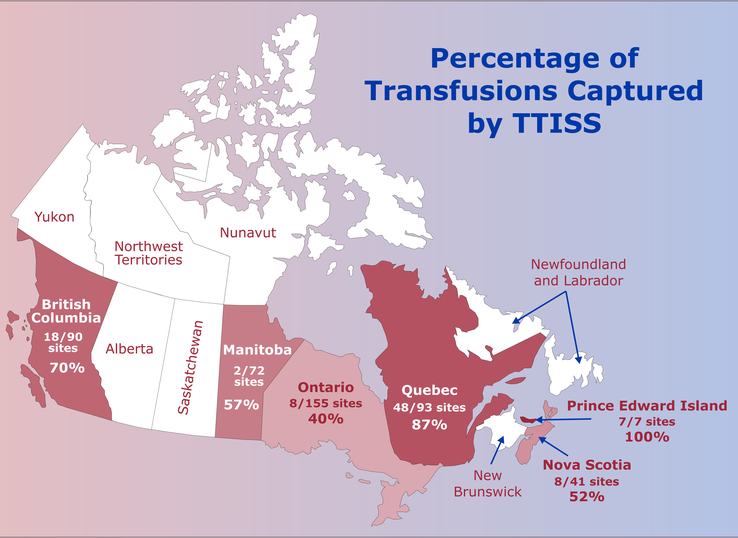


Quarterly Data Transfer

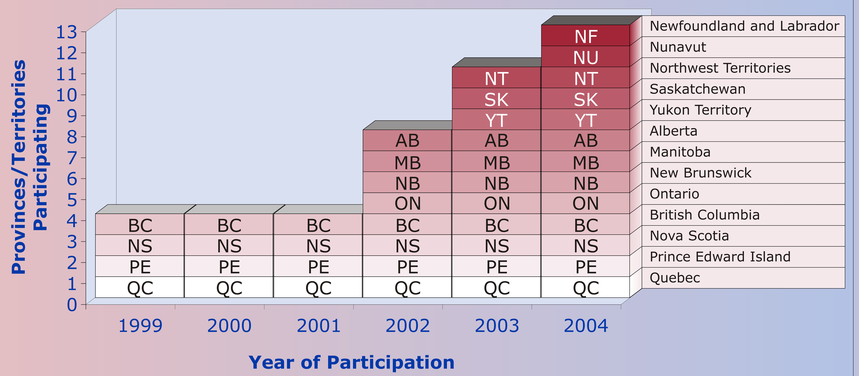
Report & Analysis



Percentage of Transfusions Captured by TTISS



Provinces/Territories Involved in TTISS



Results

- A Standardized reporting form
- A User's manual
- Standardized definitions
- Achieved consensus on:
  - Minimum required data elements
  - Rules and conditions for data reporting
  - Schedule of data reporting
- An electronic National Database which:
  - Record adverse events
  - Produce and analyse data
  - Produce reports for the provinces
  - Export data elements to Health Canada
- Published a Progress Report

Future

- Increase number of hospitals reporting in each province/territory
- Collection of denominator data
- Capture of chronic disease caused by transfusion
- Capture of errors related to transfusion
- Support transfusion medicine education initiatives

Website

- **http://www.hc-sc.gc.ca/pphb-dgspsp/hcai-iamss/tti-it**

A comprehensive national surveillance program is a critical component of public health in recognizing and monitoring transfusion related injuries related to transfusion of blood, blood components and plasma derivatives.

November 2003