The National Incident Data Repository for Community Pharmacies (NIDR)

Information and Frequently Asked Questions

Background
The Institute for Safe Medication Practices Canada (ISMP Canada) is an independent, national, not-for-profit organization that is committed to the advancement of medication safety in all healthcare settings. ISMP Canada’s mandate includes receiving and analyzing medication incident and near-miss reports, identifying contributing factors and causes and making recommendations for the prevention of harmful medication incidents.

ISMP Canada is one of the collaborating parties in the Canadian Medication Incident Reporting and Prevention System (CMIRPS), together with Health Canada, Canadian Institute for Health Information (CIHI), Patients for Patient Safety Canada and the Canadian Patient Safety Institute (CPSI). The goal of CMIRPS is to reduce and prevent harmful medication incidents in Canada.

ISMP Canada receives funding from Health Canada for medication safety activities to support the goal of CMIRPS. These activities include the analysis of reports submitted to the: National Incident Data Repository for Community Pharmacies; consumer reporting program, individual practitioner reporting program; and CIHI’s National System for Incident Reporting (NSIR). This analysis facilitates the development and dissemination of timely, targeted recommendations designed to improve health care systems and medication safety. See the infographic below for an overview of CMIRPS.
The National Incident Data Repository for Community Pharmacies (NIDR)

ISMP Canada’s National Incident Data Repository for Community Pharmacies (NIDR) is a collection of reported medication incidents submitted anonymously by community pharmacies for the purpose of improving medication safety in the community and elsewhere. The database was established in 2008 when a number of organizations came together to implement the Community Pharmacy Incident Reporting and quality improvement (CPhIR) software program. Over 800 community pharmacies are using the CPhIR program across Canada.

In 2010, Nova Scotia was the first jurisdiction to implement a requirement for community pharmacies to anonymously report medication incidents for quality improvement, and for submission of data to the NIDR. (Source: Nova Scotia College of Pharmacists Standards of Practice: Continuous Quality Assurance Programs in Community Pharmacies). A number of provinces have since implemented similar requirements.

Currently, data sharing processes allow community pharmacies to anonymously report near misses and medication incidents to the NIDR using any incident reporting platform meeting the requirements of the respective jurisdiction.

Since inauguration, the NIDR has contributed to improvements in practice through shared learning, medication safety and quality improvements, as well as informing research and policy:

- Drugs associated with quality-related events reported by community pharmacies in Nova Scotia, Canada [manuscript published in BMJ Open Quality in May 2020]
- Lessons Learned from a Multi-Incident Analysis on Medication Incidents Associated with Patient Harm in Saskatchewan [poster presented at the CSHP Professional Practice Conference in February 2020]
- Safety IQ: Lessons Learned from a Continuous Quality Improvement Program in Manitoba [poster presented at the CSHP Professional Practice Conference in February 2020]
- Quality-related events reported by community pharmacies in Nova Scotia over a 7-year period: a descriptive analysis [manuscript published in CMAJ Open in December 2018]

Frequently Asked Questions

Who can submit data to the NIDR?

ISMP Canada is ready and pleased to work with any community pharmacy, chain or banner pharmacy, regulatory authority, incident reporting platform provider, and/or other organizations to submit anonymous near misses and medication incident data from community pharmacies into the NIDR, in support of the goal of CMIRPS.
How does a community pharmacy submit data to the NIDR?

Submission of data by a community pharmacy to the NIDR involves three steps:

1. Determine the incident reporting platform(s) available in your jurisdiction and select one for use—ensure it meets all necessary criteria set out by your Pharmacy Regulatory Authority. If you wish to use an alternative reporting platform (e.g., developed in-house or corporate), please contact nidr@ismpcanada.ca.

2. Complete the Data Sharing Agreement (DSA) with ISMP Canada to allow submission of de-identified incident data to the NIDR.

Contact nidr@ismpcanada.ca for more information and to start the process.

Are the Data Sharing Agreement Forms available on-line?

The following data sharing agreement forms are available on-line:

**Manitoba:** Community Pharmacies authorizing data submission to the NIDR to support the Safety IQ program of the College of Pharmacists of Manitoba

**New Brunswick:** Community Pharmacies authorizing data submission to the NIDR to support the Mandatory Medication Incident Reporting Practice Directive of the New Brunswick College of Pharmacists

**Saskatchewan:** Community Pharmacy Professionals Advancing Safety in Saskatchewan (COMPASS)
https://scp.in1touch.org/site/DSA

What is the process for an incident reporting platform provider to submit medication incident data to the NIDR?

Submission of data to the NIDR will proceed when:

(i) a Data Sharing Agreement (DSA) has been submitted by a community pharmacy (or chain or banner pharmacy) that specifies the incident reporting platform selected.

(ii) the Data Submission Protocol Agreement (DSPA) has been signed by the incident reporting platform provider specified in the DSA in step (i); and

(iii) successful testing of the Application Programming Interface (API)/database process.

We invite medication incident reporting platform providers that are interested in submitting data to the NIDR to have their name, and a web link, added to this NIDR FAQ page.
How does ISMP Canada secure the data?

ISMP Canada upholds robust quality and privacy standards and submission protocols with all participating organizations. All connections to applications and servers are encrypted. API access is over HTTPS only. Physical access is in a commercial data centre within Canada, with 24/7 security and multiple-factor, biometric readers for server room access. API servers are configured to counter Denial of Service and other brute force attacks by rejecting traffic from hostile sources. Port scan attacks are detected and result in automatic blocking of the source. Security audits, including penetration tests, are conducted by third-party cybersecurity companies.

What data governance standards does ISMP Canada utilize to ensure secure data processes?

ISMP Canada has policies and standard operating procedures implemented for data access, analysis, IT (including security measures), privacy, human resources (e.g., confidentiality), and communication activities to manage its obligations and risks. Adherence to the policies and procedures supports the protection of data and ensures that security and privacy are high priorities.

ISMP Canada’s Privacy Policy and supporting documents are available online. ISMP Canada has completed Privacy Impact Assessments and data security audits; continued assessments and audits are included in strategic and operations planning.

How is the NIDR funded?

NIDR activities are partially funded by Health Canada through an agreement with ISMP Canada. In addition, a data processing fee is charged on an annual, per-community-pharmacy basis.

The data processing fee includes proportional costs associated with data transfer, data review and validation, data maintenance, technology system support and communications, report generation, consultation and knowledge translation.

Options for payment of the data processing fee include:
(i) working directly with ISMP Canada;
(ii) authorizing an incident reporting platform provider to work with ISMP Canada.

The data processing fee is $70 per pharmacy, paid annually.

We regularly update the information in this document.
Contact ISMP Canada at: NIDR@ismpcanada.ca if you have any questions.