

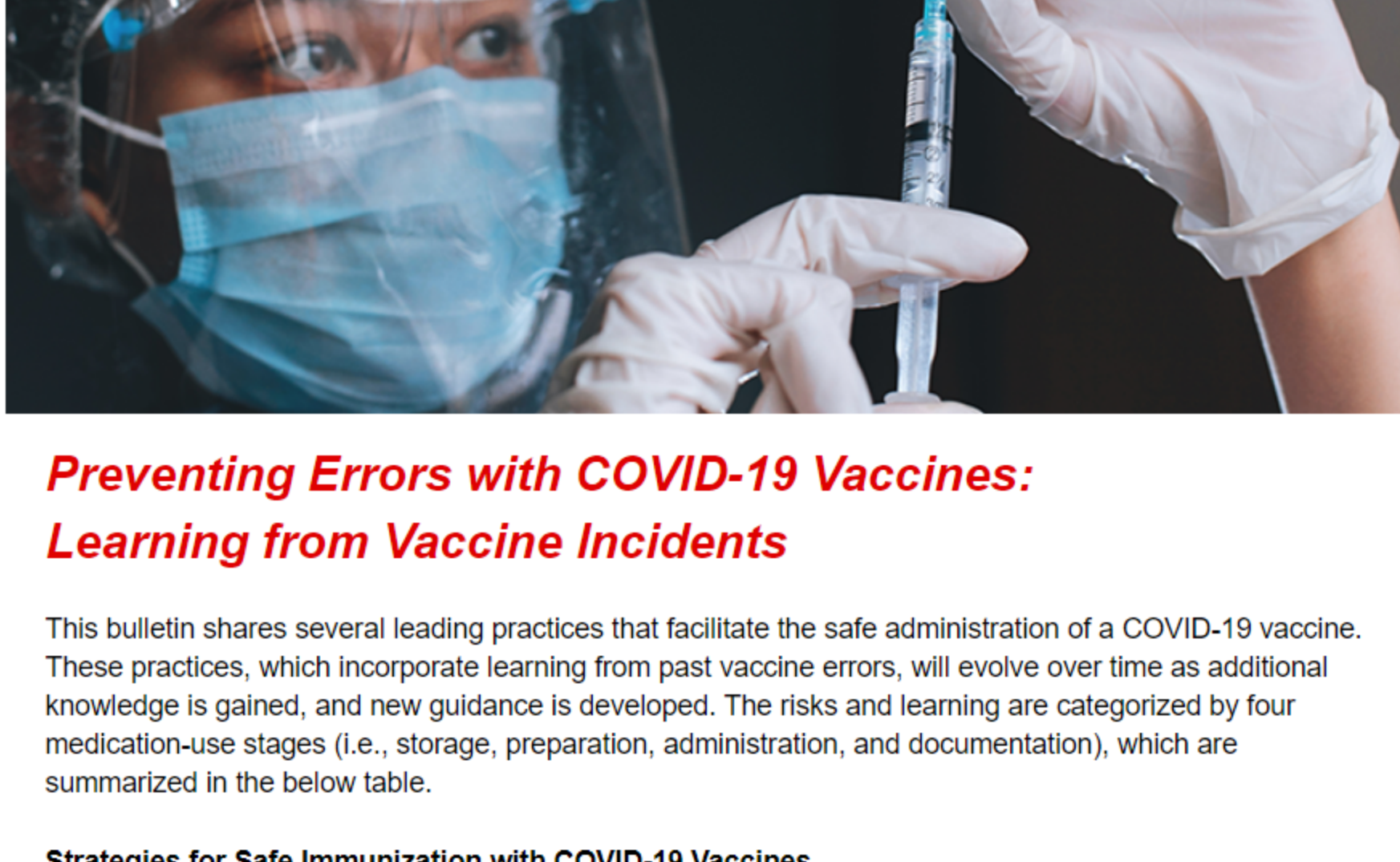
# directions

COMPASS Program Newsletter

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## Preventing Errors with COVID-19 Vaccines: Learning from Vaccine Incidents

This bulletin shares several leading practices that facilitate the safe administration of a COVID-19 vaccine. These practices, which incorporate learning from past vaccine errors, will evolve over time as additional knowledge is gained, and new guidance is developed. The risks and learning are categorized by four medication-use stages (i.e., storage, preparation, administration, and documentation), which are summarized in the below table.

### Strategies for Safe Immunization with COVID-19 Vaccines

Vaccine Use Stage	Risk for COVID-19 Vaccine Error	Strategies for Safe Vaccine Practiced
<b>Storage</b>	<ul style="list-style-type: none"> <li>Interruption of the cold chain, resulting in product spoilage</li> <li>Poor organization of storage areas, leading to selection of the wrong product</li> <li>Administration of undiluted vaccine</li> <li>Selection of outdated (expired) product</li> </ul>	<ul style="list-style-type: none"> <li>Follow the manufacturer's storage instructions and public health guidelines for temperature monitoring and develop a preparedness plan for temperature excursions.</li> <li>Never store different vaccines or drug products in one container and clearly separate and label products; consider a dedicated refrigerator/freezer.</li> <li>Wherever possible, use bar-coding technology for product identification.</li> <li>Consider bundling any required diluent together with the vaccine (e.g., upon removal of the vaccine from the freezer).</li> <li>Regularly review refrigerated/frozen vaccines and remove any expired product.</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>Improper or no dilution of vaccines that require dilution (e.g., Pfizer-BioNTech product)</li> <li>Use of product past its beyond-use date and time</li> </ul>	<ul style="list-style-type: none"> <li>Develop and follow a standard process, supported by a real-time, quick-reference sheet for dose preparation of each vaccine product.</li> <li>Label all prefilled syringes with the product name, dose (volume), lot number, and beyond-use date and time.</li> <li>Label all vaccine vials with both the puncture and beyond-use date and time.</li> <li>Wherever possible, use bar-coding technology for product identification.</li> </ul>
<b>Administration</b>	<ul style="list-style-type: none"> <li>Providing a vaccine when contraindicated</li> <li>Poor administration technique</li> </ul>	<ul style="list-style-type: none"> <li>Use a checklist to identify vaccine contraindications or precautions.</li> <li>Use appropriate landmarking to avoid injection complications.</li> <li>Suggest that patients wear short-sleeved or sleeveless clothing to their vaccine appointments.</li> </ul>
<b>Documentation</b>	<ul style="list-style-type: none"> <li>Poor documentation of vaccination, or absence of documentation</li> <li>Poor communication related to scheduling of vaccine doses</li> </ul>	<ul style="list-style-type: none"> <li>Provide patients with documentation of vaccination, including product name, lot number, and date of vaccination. MyMedRec and CanImmunize apps are options to store this information (including pictures).</li> <li>During the first vaccine appointment, book the patient's second appointment (at an appropriate interval), if possible. Send appointment reminders by phone, text, or email.</li> </ul>

As the vaccines are rolled out, vaccine-related adverse drug reactions should be reported through the customary reporting channels. In addition, consider documenting vaccine errors (regardless of outcome) through the pharmacy's usual reporting process e.g., CPhIR. These reports will support future learning and error prevention.

For additional details on potential errors with COVID-19 vaccinations, as well as strategies to optimize safe practices, see the full [ISMP Canada Safety Bulletin](#).

Article provided by Ambika Sharma, Medication Safety Specialist, ISMP Canada

[Read more](#)

### Incident Reporting Cheat Sheet

In your description, have you included:

- What?
- When?
- Where?
- Why?
- How?

Is the incident description clear and concise?

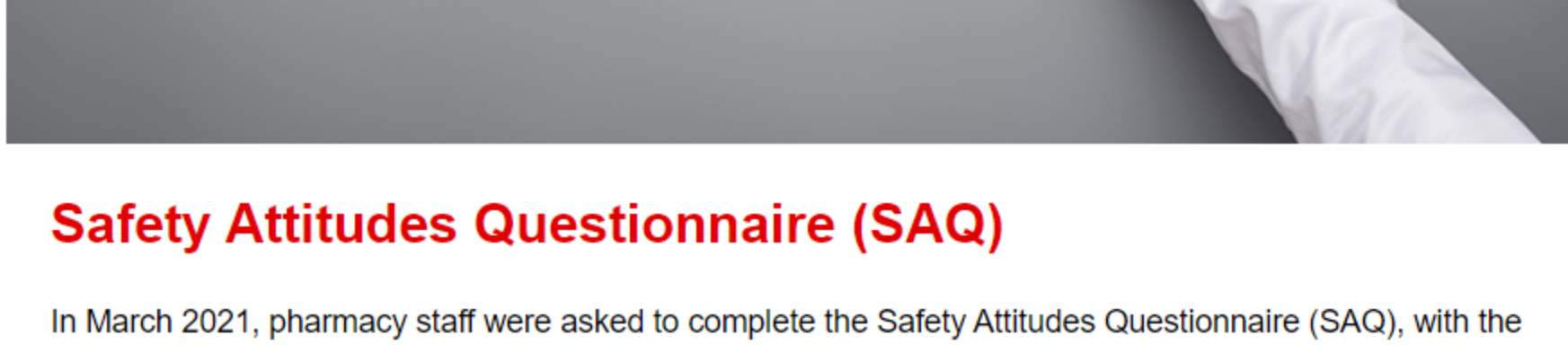
Have contributing factors been identified and are they included in the incident description?

Is the action to be taken to prevent the incident from recurring included in the incident description?



### Medication Incident Cheat Sheet

The Medication Incident Cheat Sheet was created to assist pharmacy staff in ensuring incident reports are complete. SCPP has had positive feedback from some pharmacy managers on its usefulness, but there has also been a lack of awareness from others. Pharmacies are encouraged to print off the [cheat sheet](#) and have it handy when medication incidents are reported. Please see a copy of the cheat sheet below. To access a copy for printing, [click here](#).



## Safety Attitudes Questionnaire (SAQ)

In March 2021, pharmacy staff were asked to complete the Safety Attitudes Questionnaire (SAQ), with the goal to evaluate the advancement in the culture of safety within community pharmacies since the first SAQ was administered in November 2018.

The response to the survey was exceptional. There were 340 responses (306 pharmacists + 34 pharmacy technicians), which is an increase of 110 responses from the previous SAQ. The response rate also increased from 18.2 per cent in 2018 to 25.3 per cent in 2021. Thank you to all the pharmacists and pharmacy technicians who responded, your participation in this survey is greatly appreciated.

The Safety Attitudes Questionnaire (SAQ) is the most commonly used and validated tool for assessing safety culture. It assesses six main factors (teamwork climate, job satisfaction, perceptions of management, safety climate, working conditions, and stress recognition) with approximately 40 questions. The intent for administering the SAQ is to obtain updated data regarding the attitudes of pharmacists and pharmacy technicians.

Some of the preliminary results from the most recent SAQ are the following.

#### Demographics:

Position:

- Pharmacist (manager/owner): 39.12%
- Pharmacist (staff): 50.88%
- Pharmacy Technician: 10.00%

Pharmacy Type:

- Independently owned: 31.18%
- Banner: 25.59%
- Corporate: 43.24%

Years of experience:

- 0-5 years: 53.24%
- 6-10 years: 16.47%
- 11-20 years: 17.35%
- 20+ years: 12.94%

Safety Culture:

- 84.80 per cent of all respondents agree strongly they would feel safe being treated as a patient at their respective pharmacy.
- 77.81 per cent of all respondents agree strongly that medication errors are handled appropriately in their respective pharmacy.
- 60.18 per cent of all respondents disagree strongly that it is difficult to discuss errors at their respective pharmacy.
- 13.38 per cent of respondents either agree slightly or agree strongly that it is difficult to discuss errors at their respective pharmacy.

Perception of Management:

- 73.60 per cent of all respondents agree strongly that pharmacy management does not knowingly compromise patient safety.
- 67.08 per cent of all respondents either agree slightly or agree strongly that the staffing levels at their respective pharmacy are sufficient to handle the number of patients.
  - 24.85 per cent either disagree slightly or disagree strongly to this statement.

Job Satisfaction:

- 85.58 per cent of all respondents either agree slightly or agree strongly that their respective pharmacy is a good place to work.
- 73.01 per cent of all respondents either agree slightly or agree strongly that morale at their respective pharmacy is high.

The results of the SAQ are currently being reviewed and analyzed and the report from ISMP Canada will be available for review in the Fall 2021. Watch for the link to the report in a subsequent edition of [directions].



## Shared Learning Opportunity

### Look-Alike/Sound-Alike Drugs

A handwritten prescription from a hospital ER was presented at the pharmacy for a child for Cefixime 60mg QD for 10 days by the child's parent. However, when the prescription was filled, it was filled as Cefuroxime 2.4mls (250mg/5mls) QD x 10days.

Two days after the prescription was filled, the physician called to inform the pharmacist that the patient was not improving and to inquire if they had written the prescription correctly. It was at that time that the medication incident was discovered.

It was determined through the Culture and Sensitivity (C&S) test that there was susceptibility with cefuroxime and so the cefuroxime was continued but the dose was increased to the appropriate amount.

Upon review of the incident by the pharmacy staff, it was determined that the main contributing factors that led to the incident occurring were: 1. Look-alike/sound-alike drug names and 2. Faulty drug identification.

As a result of the pharmacy staff discussion regarding the incident, it was determined that due to both generic drug names starting with "CEF" the computer software auto-populated the incorrect generic drug name and the staff entering the order was not aware that the wrong generic drug name was auto-populated. The system-based solutions that were recommended were;

1. To ensure that the correct drug is chosen and corrected if the computer auto-populates the incorrect drug and
2. Utilize resources such as Vigilance, if there is any doubt regarding the correct generic name.

These interventions will be monitored for effectiveness.

More information can be found on the ISMP Canada website regarding look-alike-sound-alike medications. Please see this short presentation under the CE and Resources section of the CPhIR website - [Preventable Medication Errors: Look-Alike/Sound-Alike Drug Names – August 2014](#).

This incident was reported here with the involvement and permission of the Saskatchewan community pharmacy.

### Incidents that Occurred Due to Order Entry Errors

Order entry is part of the medication-use process where prescriptions are transcribed onto the pharmacy practice management system (PPMS) or pharmacy dispensing software. Transcribing errors generally result in patients receiving the wrong drug, incorrect dose, incorrect formulation, or incorrect instructions.

They commonly arise from technical errors where the information was transcribed incorrectly, but there are also clinical errors where dispensing should have been stopped due to an identifiable drug therapy problem.

#### Technical Errors

As part of the dispensing process, all members of the pharmacy team can be expected to transcribe prescriptions. Look-alike/sound-alike drug names is a well-known contributing factor of transcribing errors resulting in potential patient harm. Similarly, transcribing errors have occurred when prescriptions are copied over from old prescriptions.

There are systems-based solutions that can minimize the risk of transcribing errors. Tall-man lettering can minimize the risk of medication errors attributable to look-alike/sound-alike drug names and should be considered in all pharmacy software. Although copying prescriptions is a convenient method to speed up the transcribing process for similar prescription orders, it also offers a new avenue for errors to occur. As such, it should be used judiciously, ideally only when the medication, strength, and instructions are all identical.

#### Clinical Errors

Pharmacists are expected to perform therapeutic checks on prescriptions.

Harm incidents have occurred when allergy or drug interaction alerts were bypassed. At times, therapeutically inappropriate medications were dispensed when pharmacists were not aware of new medications or formulations.

Professional judgement made by pharmacists (e.g., bypassing a drug-drug interaction alert) should be well documented such that the rationale for a clinical decision can be traceable.

An evidence-based point-of-care clinical decision support system and drug information resources should be easily accessible to support pharmacists' expanded scope of practice.

Order Entry Errors	
Harm incidents result from inappropriate prescription transcribing, technical errors, or clinical errors.	
Sub-Themes	Incident Examples
<b>Technical Errors</b>	
Order entry errors resulting from choosing the wrong product or incorrectly transcribing the prescription directions or instructions	<p>Patient was taking Citalopram 10 mg, but it was transcribed and dispensed as Escitalopram 10 mg instead. The patient returned to the physician due to nausea and lack of response to the medication.</p> <p>Patient was taking Bupropion XL 150 mg 2 tablets once daily. With a backorder, the physician issued a new prescription for Bupropion SR 150 mg 1 tablet twice daily. When entering the prescription, the Bupropion XL prescription was copied over; the medication was changed correctly but the prescription directions were not. As a result, the patient felt unwell for several weeks and had to see the physician</p>
<b>Clinical Errors</b>	
Order entry errors due to improper clinical verifications	<p>Patient was prescribed Tylenol No. 3. There was an allergy notification for Codeine on the patient's profile, but the alert was bypassed by the pharmacy assistant when entering the prescription. The pharmacist did not review the patient's allergies when checking nor inquire about patient allergies upon counselling. Several days later, the patient reported allergy-related adverse effects</p>

The above information was reprinted from ISMP's Canada Report – COMPASS Harm Incidents Qualitative Analysis – July 2019 (pages 7-8).

## We want to hear from you!

One of the goals of COMPASS is to promote shared learning between Saskatchewan pharmacies regarding incidents, unsafe practices and other important issues to improve pharmacy care in Saskatchewan.

One way to promote shared learning would be to report an interesting incident/error that occurred within your pharmacy. If your pharmacy has had an incident that would be a good learning opportunity for other Saskatchewan pharmacies, please forward it to SCPP Medication Safety at [info@saskpharm.ca](mailto:info@saskpharm.ca).

Any information regarding the pharmacy and the person who provided the details of the incidents/errors will be kept anonymous. The College encourages open sharing of incidents/errors so everyone can learn from them.

## Statistics

Statistical reports are provided to bring awareness of the importance of identifying, reporting and discussing medication incidents. A total of 32,066 incidents have been reported to the Community Pharmacy Incident Reporting (CPhIR) database between December 1, 2017 and March 30, 2021. The statistics below relate to this time period.

#### Outcomes

- 18,986 reported incidents had an outcome of NO ERROR/NEAR MISS, which means the incidents were intercepted BEFORE they reached the patient.
- 12,161 NO HARM incidents, which means the incidents reached the patient, but did not cause harm.
- 910 reported incidents did result in HARM, with most of these in the category of MILD or MODERATE HARM. There have been 3 incidents reported with an outcome of DEATH.

#### Incident Types – Top 3

- Incorrect dose/frequency – 7,518
- Incorrect quantity – 5,489
- Incorrect drug – 5,362

**394** pharmacies have either started or completed their Medication Safety Self-Assessment (MSSA) online data entries.

**838** Continuous Quality Improvement (CQI) meetings have been held.

## The SMART Medication Safety Agenda

The topic of the latest edition of the SMART Medication Agenda is **Vaccines**. All previous editions of the SMART Medication Safety Agenda can be found under the COMPASS link on the SCPP website under [COMPASS Newsletters](#).

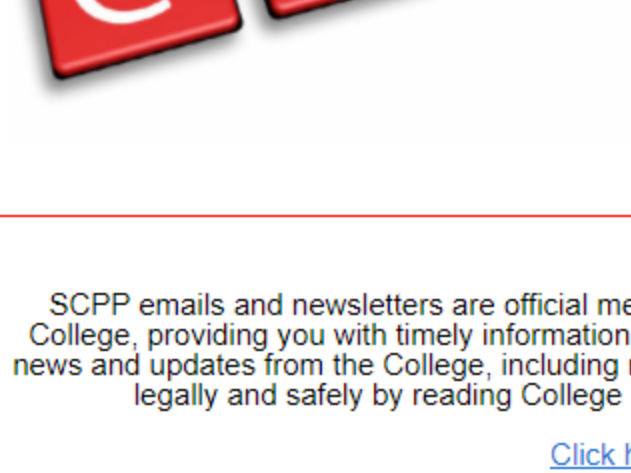
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