



# Failure Mode and Effects Analysis (FMEA) Workshop for Pharmacists

**Friday, September 27, 2013**  
**8:30 am – 4:00 pm**

Workshop curriculum is derived from the Canadian Failure Mode and Effects Analysis Framework and a customized version of the Framework for the pharmacy setting completed by the Institute for Safe Medication Practices Canada for the Alberta College of Pharmacists.

## PROGRAM AGENDA

- 1. Medication Safety 101**
  - Overview of Systems Approach
  - Impact of Human Factors Engineering
- 2. Select and diagram a process to analyze**
- 3. Brainstorm potential failure modes, identify the effects and causes of the potential failure modes and prioritize them**
- 4. Redesign the process to address potential failure modes and analyze and test changes**
- 5. Introduction to implementing and monitoring the redesigned process**

## Program Abstract:

Failure Mode and Effects Analysis (FMEA) is a technique used to identify process and product problems before they occur. This one-day workshop begins with an overview of the fundamentals of medication safety: systems approach and human factors engineering principles. The workshop curriculum will be specific to the pharmacy practice environment.

FMEA is forward-looking, in contrast to the retrospective approach of incident analysis and techniques such as root cause analysis. FMEA is based on the premise that all systems and processes contain embedded system failures.

FMEA is a team-based, structured process that includes diagramming or mapping the steps in a process, identifying the potential failure points and consequences of each, and ultimately determining what steps to take in order to reduce the potential for the identified failures to occur.

Interactive group work will support participants to learn how to diagram a process, how to identify potential failures, and how to redesign processes with consideration of human factors principles to decrease the likelihood of a failure impacting a patient.

## Location:

ISMP Canada Office  
4711 Yonge Street, Suite 501  
(Procter & Gamble building)  
Toronto, ON  
Tel: 416-733-3131

**Program Length:** 6.5 hours

**Audience:** Pharmacists, Pharmacy Technicians, Pharmacy Students & Interns

## Learning Objectives:

By the end of this workshop, participants will be able to:

- Describe the impact of system factors on error potential
- Apply basic human factors engineering principles in a healthcare environment
- Identify processes suitable for analysis using FMEA
- Describe the steps in conducting FMEA
- Map out a process and identify potential failure modes
- Develop redesign strategies based on systems theory and basic human factors principles
- Apply principles learned to support medication safety activities in their practice setting



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### How to Register

**Fax:** 416-733-1146  
Attn: Alice Ho  
**Mail:** ISMP Canada  
4711 Yonge Street, Suite 501  
Toronto, ON M2N 6K8  
Attn: Alice Ho  
**Contact:** Alice Ho,  
Administrative Assistant  
Phone: 416-733-3131 ext. 236  
Email: aho@ismp-canada.org

## REGISTRATION INFORMATION (Please print clearly)

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Mailing Address: Business: \_\_\_\_\_  
Home: \_\_\_\_\_

City: \_\_\_\_\_ Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email (to be used for registration confirmation): \_\_\_\_\_

### Course Registration Fee \$500 per person\* (all taxes included)

Total payable: \$

\* ISMP Canada reserves the right to cancel or re-schedule the workshop if minimum enrolment is not reached

### Method of Payment

 Cheques are payable to "ISMP Canada". Registration must be accompanied by payment.

Cheque    VISA®    Mastercard®

Name of Cardholder: \_\_\_\_\_

Credit Card #: \_\_\_\_\_ Expiry Date: \_\_\_\_\_

Signature: \_\_\_\_\_ GST Registration #898242219

#### Cancellation Policy:

Requests for cancellations or refunds must be submitted in writing to ISMP Canada prior to September 21, 2013. A \$75.00 cancellation fee will apply. Cancellations will not be accepted after September 21, 2013.



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<b>AM</b>	<b>8:15 – 8:30</b>	<b>Registration</b>
	<b>8:30 – 8:45</b>	<b>Welcome, introduction, goals for the day</b>
	<b>8:45 – 9:30</b>	<b>Medication Safety 101</b> • Scope of the problem • System approach • Impact of human factors engineering principles on error potential and solution development
	<b>9:30 – 9:45</b>	<b>Break</b>
	<b>9:45 – 10:15</b>	<b>FMEA Step 1 and Step 2</b>
	<b>10:15 – 10:45</b>	<b>Small Group Exercise</b> – Everyday FMEA
	<b>10:45 – 11:00</b>	<b>Break</b>
	<b>11:00 – 12:00</b>	<b>Group Exercise</b> – Step 1 and Step 2
<b>PM</b>	<b>12:00 – 1:00</b>	<b>Lunch</b>
	<b>1:00 – 1:30</b>	<b>FMEA Step 3, Step 4, and Step 5</b>
	<b>1:30 – 2:30</b>	<b>Group Exercise</b> – Step 3 Step 4 and Step 5
	<b>2:30 – 2:45</b>	<b>Break</b>
	<b>2:45 – 3:00</b>	<b>FMEA Step 6 and Step 7</b>
	<b>3:00 – 3:30</b>	<b>Group Exercise</b> – Step 6 and Step 7
	<b>3:30 – 3:45</b>	<b>Introduction to FMEA Step 8</b>
	<b>3:45 – 4:00</b>	<b>Closing Remarks / Feedback</b>

\*Workshop curriculum derived from the Canadian Failure Mode and Effects Analysis Framework<sup>®</sup> developed by ISMP Canada.

**ISMP Canada: A key partner in the Canadian Medication Incident Reporting and Prevention System (CMIRPS)**