

# The Road to the Simulation

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# Objectives

- Learn the types of disaster training for healthcare providers
- Discussion preparation steps required before a full scale disaster exercise
- Describe the golden rules & pitfalls to avoid to ensure a disaster simulation is effective

# Disaster Medicine Training Myths



# Disaster Medicine Training Myths

- It is impossible to be prepared for a disaster simulation.
- The government will take care of it.
- A single « generic » ou « standardized » disaster prep training (ex: like ACLS) will be sufficient.
- An occasional sim once in a while is sufficient to refresh your memory and be prepared.

# The Challenges of Disaster Medicine Training



# The Challenges of DM Training

- There are long delays between the training and the actual real event.
- Responding to a particular disaster situation requires adaptability and identifying new solutions (no universal protocol or recipe).
- Those who received training are not necessarily those who will be responding to the real situation.
- Training is often based on response plans which are often based on wrong assumptions.

*Auf der Heide, E. The Importance of Evidence-Based Disaster Planning, Ann Emerg Med. 2006;47:34-49*

# WHO Publication – Feb 2017

- Well written
- Free & available online

## WHO Simulation Exercise Manual



*A practical guide and tool for planning,  
conducting and evaluating simulation exercises  
for outbreaks and public health emergency  
preparedness and response.*

# The different types of DM exercises

## 1) Based on discussion

Tabletop

## 2) Operational exercises

Drill

Functional exercise

Full-scale exercise

# Decon Drill

RVH

Sept 15, 2015



## Staff Recall Drill







« OCTOGONE »  
18 octobre 2017  
Aéroport  
Montréal-Trudeau



# **CODE ORANGE**

**SIMULATION - MONTRÉAL 2012**

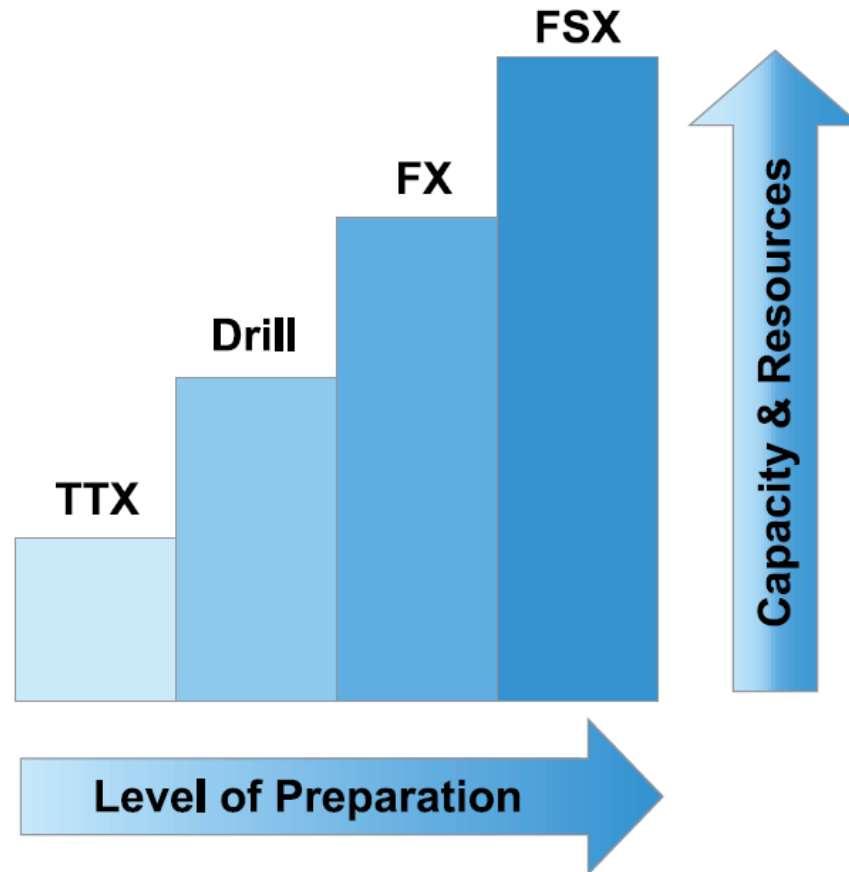
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# The Different Types of DM Exercises

Fig. 3. Level of preparation and capacity per exercise



## Progressive Approach :

- Training program
- Increasing level of preparedness

# Choosing the appropriate type of training

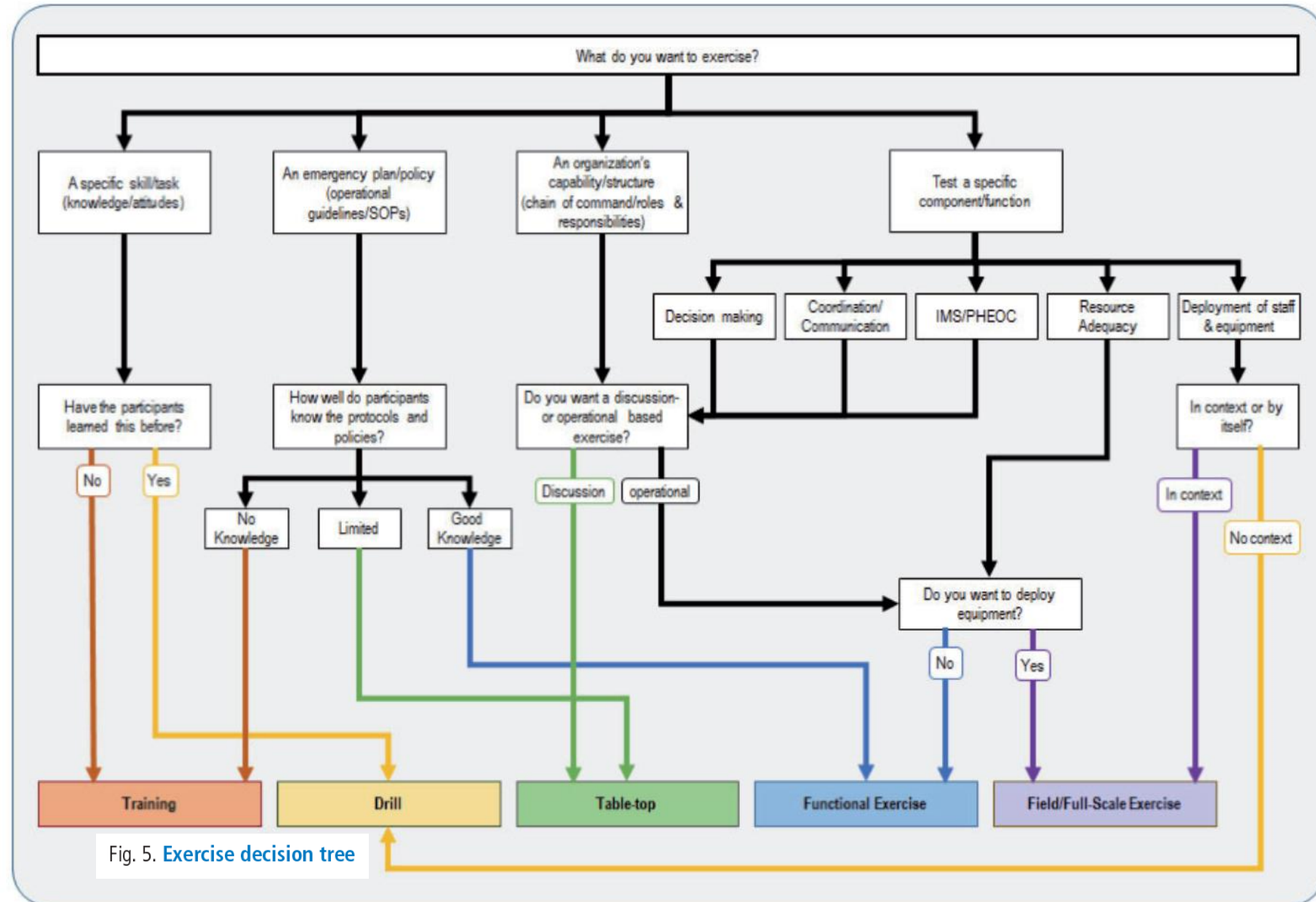


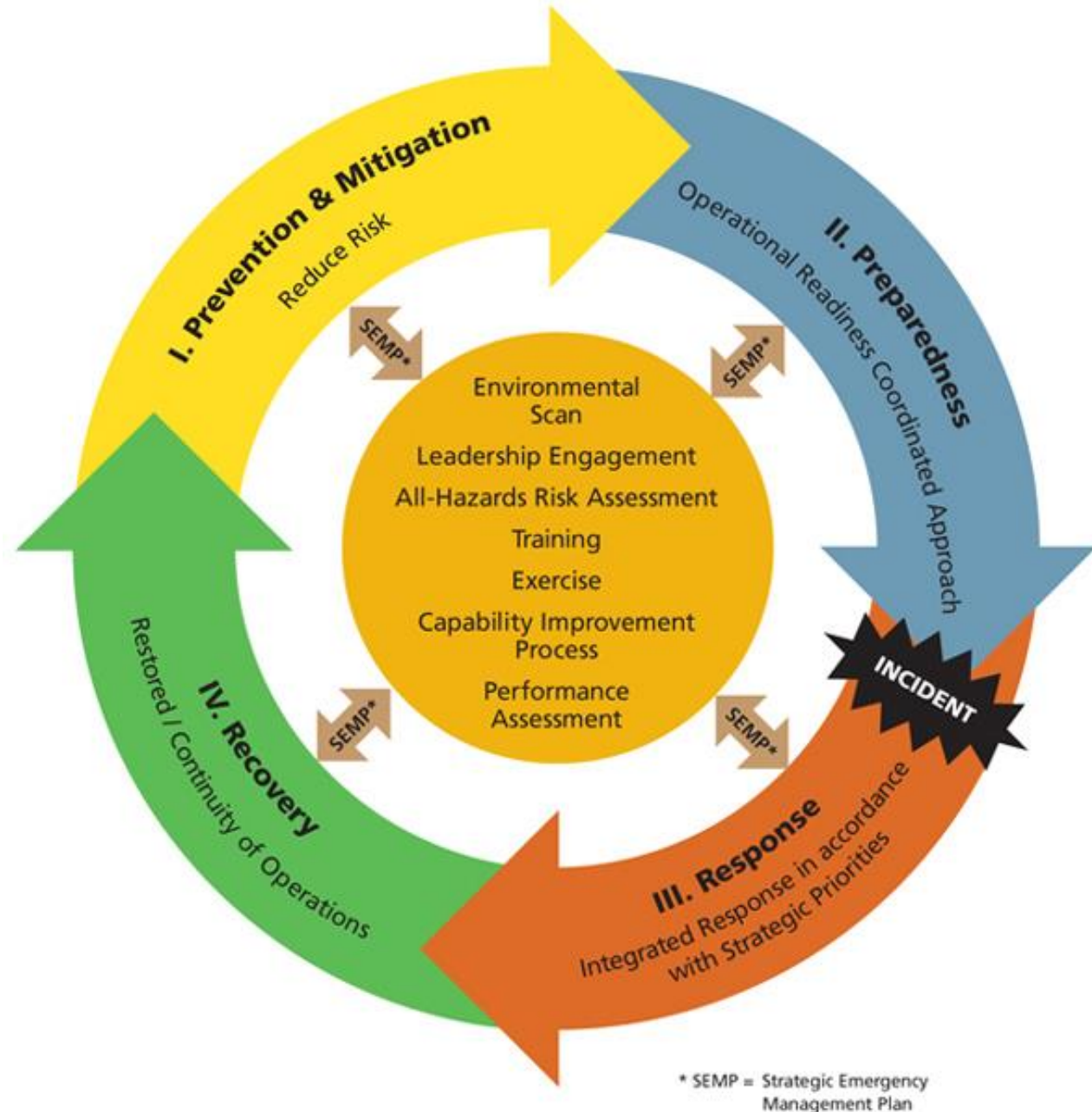
Fig. 5. Exercise decision tree

# Preparation Steps

Fig. 9. FSX project roadmap



# Keep the wheel turning!



[https://www.securitepublique.gc.ca/cnt/rsrscs/pblctns/mrgnc-mngmnt-pnnng/index-fr.aspx#figure\\_1](https://www.securitepublique.gc.ca/cnt/rsrscs/pblctns/mrgnc-mngmnt-pnnng/index-fr.aspx#figure_1)

# Evaluation during the Exercise

- 1) Know the objectives and goals for the simulation.
- 2) Ensure you have a method to assess if goals are met.
- 3) Let the participants play.
- 4) Ensure sufficient time for debrief.



# Useful Resources

- WHO Simulation Exercise Manual. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO
- Guidelines for Developing Emergency Simulations and Drills. Washington D.C.: Panamerican Health Organization, 2011
- Hospital Surge Evaluation Tool. User Manual for Controllers and Evaluators. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response, Office of Emergency Management, Hospital Preparedness Program, December 2014



Multi vehicle collision in highway tunnel in the evening - 112 casualties.



# Feedback – Many Phases

1) Hot wash

2) Main Debrief

Food

Ensure sufficient time

3) Closure & certificates

4) Organizing committee debrief

# Financial Aspects

## *Elements to Consider...*

- Recruit hospital volunteers, medical students, nursing and paramedic students
- Find sponsors & financial partners
- Involve different agencies and ensure each agency identifies their own simulation objectives
- Consider CME accreditation for the event

# Keys to a Successful Exercise



- Start planning in advance
- Obtain authorizations
- Create a multidisciplinary team
- Assign a rep for external organizations
- Make a budget
- Obtain funding
- Pick the date early in the process

# Take Home Messages

- Practical exercises must be integrated into a training program.
- Disaster medicine is a team sport. Different types of HCP, external agencies & partners must be involved.
- No-notice exercises are encouraged when adequate preparatory training has been completed.
- Start planning in advance and pick the date for the exercise early in the preparation process.

# References

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Hospital Surge Evaluation Tool. User Manual for Controllers and Evaluators. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response, Office of Emergency Management, Hospital Preparedness Program, December 2014