Simulation games for crisis management

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McGill UNIVERSITY

What use are simulation games for crisis response?

- Generic training
  - *"these are the kinds of issues and challenges that come up in responding to a local or global health emergency"*
- Contingency planning for future crisis
  - *"let's rehearse or stress-test our plans"*
- Operational planning for current crisis
  - *"let's use a simulation to refine current, time-sensitive operational planning"*

BT

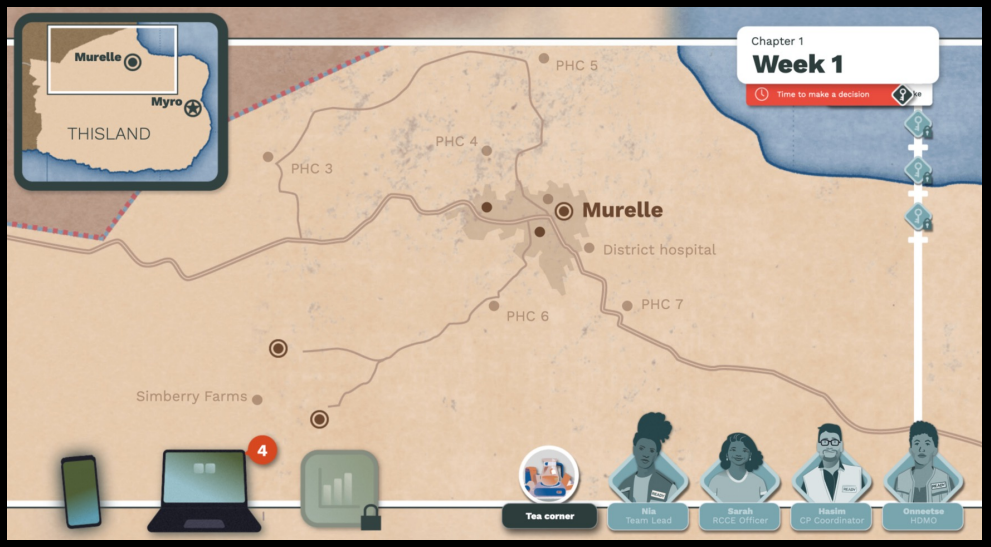
Generic crisis training

- familiarity with common challenges, mechanisms, stakeholders
- introduction to coordination and process issues
- the importance of "fog and friction"
- adaptability and innovation under conditions of psychological stress
- "safe to fail environment"

MEDIA
Low Income
713 Persons at risk
Medical
WASH
Food
Shelter
Rescue
Infrastructure
Security
Assessment
Social Unrest

GOARN
Global Outbreak Alert and Response Network
Global Outbreak Alert and Response Network
OUTBREAK RESPONSE
START

READY
OutbreakREADY
A Digital Readiness and Response Simulation


Murelle
Myro
THISLAND
Chapter 1
Week 1
Time to make a decision
PHC 5
PHC 4
PHC 3
Murelle
District hospital
PHC 6
PHC 7
Simberry Farms
4
Tea corner
Nia
Team Lead
Sarah
RCCE Officer
Hasim
CP Coordinator
Onneetse
HDMO

BREAKING NEWS
HELP IS ON THE WAY?

MEDICAL TEAM
CONDUCT AUTOPSY
(REQUIRED MEDICAL TEAM)
TRIAGE
CRITICAL
MAJOR
ER
ICU
WARD

ACTION
PHASE
BRIEFING
MOVEMENT
COMBAT
EMERGENCY SERVICES

Contingency planning for future crisis

- op plan familiarity and rehearsal
- ironing out communication and coordination mechanisms
- identifying vulnerabilities
- checking assumptions
- risk assessment and mitigation
- simulation as vaccination

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ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
Edmonton
Calgary
Regina
Saskatoon
Winnipeg
Swan River
Dauphin
Brandon
Lake Winnipeg
Pickle Lake
Sioux Lookout
Nakina
Missouri
Billings
Bismarck
Fargo
Duluth
Lake Superior
Minneapolis
St. Paul
Pierre
Sioux Falls
Cedar Rapids
Madison
Milwaukee
Rockford
Lake Michigan
African Swine Fever
Impossible
Provincial Governments
Infected

Operational planning for current crisis

- all things in the earlier slide, but:
  - much greater specificity
  - integrated into a planning cycle
  - Do No Harm
    - high-stakes, time-sensitive
    - overburdened staff with limited bandwidth
    - "unsafe to fail" environment with much less room for error and "no right to be wrong"

COVID-19 vaccine rollout

Week 1
23-26 November 2020

Independent Red Team

Week 2
2 December 2020

Tabletop Exercise

Week 3
11 December 2020

Independent Red Team

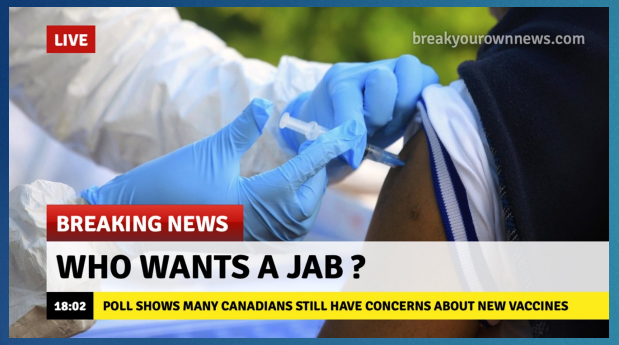
Distribution Plan → Contingencies → Mitigating Courses of Action → Residual Risks

LIVE
breakyourownnews.com
BREAKING NEWS
FIRE AT MADRID VACCINE FACILITY
17:59
FIREFIGHTERS EXTINGUISH BLAZE AT LABORATORIOS FARMACÉUTICOS ROVI

LIVE
breakyourownnews.com
BREAKING NEWS
NOT COLD ENOUGH?
20:53
DISTRIBUTION OF PFIZER VACCINE HAMPERED BY COLD STORAGE PROBLEMS

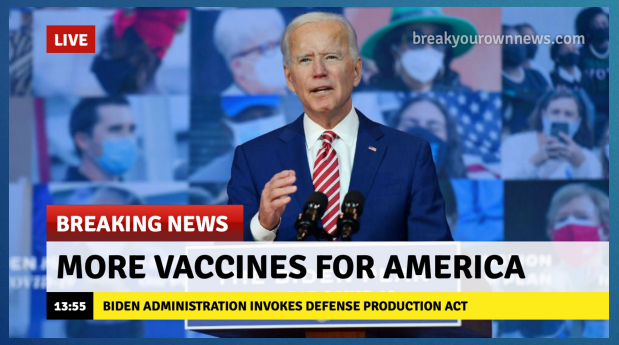
LIVE
breakyourownnews.com
BREAKING NEWS
HACKERS TARGET HEALTHCARE
14:57
PROVINCIAL GOVERNMENT DETECTS "UNAUTHORIZED ACCESS ATTEMPTS"

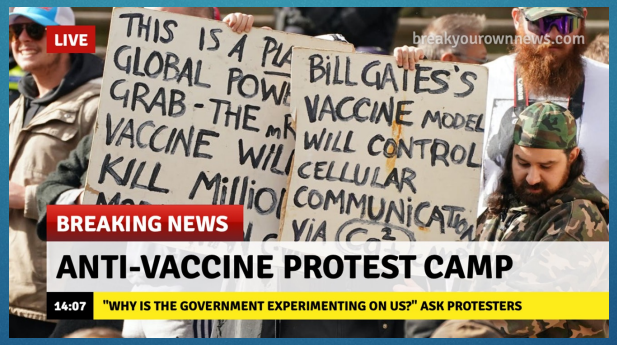
LIVE
BREAKING NEWS
MAKING US SICK?
14:11
QUESTIONS RAISED ABOUT VACCINE EFFECTS


LIVE
breakyourownnews.com
BREAKING NEWS
WHO WANTS A JAB ?
18:02
POLL SHOWS MANY CANADIANS STILL HAVE CONCERNS ABOUT NEW VACCINES

LIVE
breakyourownnews.com
AMBULANCE
BREAKING NEWS
BELGIUM PROBES VACCINE DEATH
21:05
OFFICIALS SAY "NO EVIDENCE YET THAT THE VACCINE IS RESPONSIBLE"

LIVE
breakyourownnews.com
BREAKING NEWS
FAIR SHARE?
21:50
SOME PROVINCES MAY WANT MORE, POINTING TO BACKLOGS AND INFECTION RATES


LIVE
breakyourownnews.com
BREAKING NEWS
MORE VACCINES FOR AMERICA
13:55
BIDEN ADMINISTRATION INVOKES DEFENSE PRODUCTION ACT


LIVE
breakyourownnews.com
BILL GATES'S
VACCINE MODEL
WILL CONTROL
CELLULAR
BREAKING NEWS
ANTI-VACCINE PROTEST CAMP
14:07
"WHY IS THE GOVERNMENT EXPERIMENTING ON US?" ASK PROTESTERS

LIVE
breakyourownnews.com
BREAKING NEWS
SHOULD FEDS STEP IN?
22:03
GROWING NUMBER OF GROUPS DEMAND NATIONAL STANDARD

COVID-19 vaccine rollout

CBC News, 3 December 2020

> Fortin says military organizers have been working for months with government, scoping out the logistics that will be involved.
>
> There have been discussions, "tabletop exercises," and he said his team now is looking to "identify risks, discuss mitigations, look at decision points, and look at ways to ensure that we deliver vaccines as effectively as possible, as rapidly as possible. And as safely, more importantly, as safely as possible to all Canadians, including up to the remote and isolated communities."

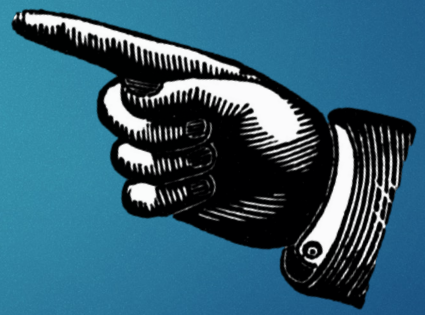
Toronto Star, 27 November 2020

> "We know a lot about getting new aircraft and types of transport planes, trains and automobiles to these places, but doing it with vaccines that are somewhat fragile and need to be under certain conditions, warehousing them, making sure you're keeping track of who's getting it when, all of these things are things that right now are being laid out... They're rehearsing tabletop exercises what this will look like as soon as we have access," Lawson said.

CTV News, 28 November 2020

> Fortin said there have been "tabletop" exercises to plan the distribution over the last weeks, including one on Wednesday that involved more than 150 people from all 13 provinces and territories, and eight federal departments and agencies.
>
> The Canadian Armed Forces received formal orders last week to start planning for the distribution of COVID-19 vaccines, though the military's top commander says preparations have been under way for longer.

Canadian Press, 3 December 2020

Issues in simulation design

- Synchronizing objectives, resources, participants, and methods
  - Manual or digital simulation?
- Considering impact
- Do you really need a game/simulation?
  - other forms of experiential learning
  - other forms of alternate analysis