



Nephrology DAYS 2009

November 5–6
Renaissance Vancouver
Hotel Harbourside



BC Renal
Agency

An agency of the Provincial
Health Services Authority



Sustainability in Kidney Care



A BRIDGE OVER TROUBLED WATER **An Exercise of Our Provincial Renal Disaster Plan**

OPERATION: BRIDGE

Exercise Design Committee:

Bill Kane

Edith Davidson

Dr. Monica Beaulieu

Susanne Mackinnon

Dave Morrison

Thanks To:

Maclaire Bolton

BC Provincial Emergency Program



AGENDA:

- 0900 Opening Remarks/Introductions
- 0905 Review of tabletop exercise
- 0920 Scenario – Part 1
- 0935 Part 1 – Review
- 0955 Scenario – Part 2
- 1025 Part 2 - Review
- 1045 Debrief
- 1055 Exercise Evaluation Form/Conclusion



OBJECTIVES

- Validate BC Provincial Renal Agency Response Plan
- Familiarize staff on their role and responsibilities as they relate to the Plan.
- Identify gaps in the Plan
- Familiarize participants with their Regional Renal Program's plan



EXPECTED ACTIONS

- Identification and utilization of Plan
- Identify steps involved in activating plan
- Appropriate escalation of Plan
- Route inputs (questions/problem statements) to the appropriate function
- Identify which personnel/agencies would be involved in this type of scenario
- Tasks and responsibilities addressed by appropriate personnel
- Reference plan and report any discrepancy in interpretation or flow of the Plan



RULES/GUIDELINES

- This is a no-fault exercise and is intended to evaluate systems, not people
- Please refrain from engaging any external sources during the exercise
- Consultation from a member of another group is permitted
- Questions should be thoroughly explored but answered in a timely manner
- Avoid in-depth conversations concerning unrelated issues
- Respect varying viewpoints of the other participants, including those with which you may disagree
- Be aware that there is no single accepted solution



ADDITIONAL CONSIDERATIONS

- Information captured in today's session will be protected
- Gaps that are identified should be documented as this is an important element of the overall exercise outcome
- Recommendations that result from the exercise will be further explored and where possible implemented into existing practices
- Discussion will focus on a set of questions – these may or may not reflect the order in which issues are dealt with during a real emergency
- The scenario may move faster than it would actually play out in reality
- Attempt to structure your answers using the framework from the response plans
- Some questions may be answered easily by one member of the group; questions such as these are included to share knowledge about particular issues and processes that may not be widely known
- The exercise is designed to focus conversation on specific aspects of response



EXERCISE FORMAT

- Exercise players will be split into groups based on health authority
- A scenario will be read and copies provided
- Each group will review and discuss questions related to the scenario
- Facilitators will provide clarification and guidance as necessary
- After a set period of time, all groups will reconvene and review major discussion points
- The session will end with a formal debrief



** PART 1 **

Exercise

Georgia Strait
earthquake
magnitude 7.3



Earthquake Summary:

- M=7.3 Georgia Strait, BC
- Located in the Georgia Strait
- 18 km southeast of Gibsons
- Shallow, thrust faulting within North America Plate
- Shaking continued for about 45 seconds

Effects:

- Felt throughout Lower Mainland, Vancouver Island, as far east as the Rocky Mountains, Bella Bella, central BC Coast and Southern Oregon
- Major damage reported in Vancouver, Lower Mainland, Nanaimo and Victoria
- Washington State is also reporting damages
- Severe damage to historic parts of effected areas
- Vancouver = Gastown, Yaletown
- Victoria = historic buildings, unreinforced masonry structures
- Aftershocks are expected





Main Damage:

- Liquefaction, landslides and fires
- Closure of some transportation infrastructure
- Damage to older block and brick buildings
- Damage to utilities such as phones, electrical, etc

Human impact:

- Injuries
- Deaths
- Distress

Modified Mercalli Intensity

 ≥VII	General alarm. Some damage to masonry structures (VII).	 V	Felt indoors and outdoors. Many concerned. No damage.
 VI	Felt by everyone. Many frightened. Damage minor.	 ≤IV	Shaking perceptible by people indoors.

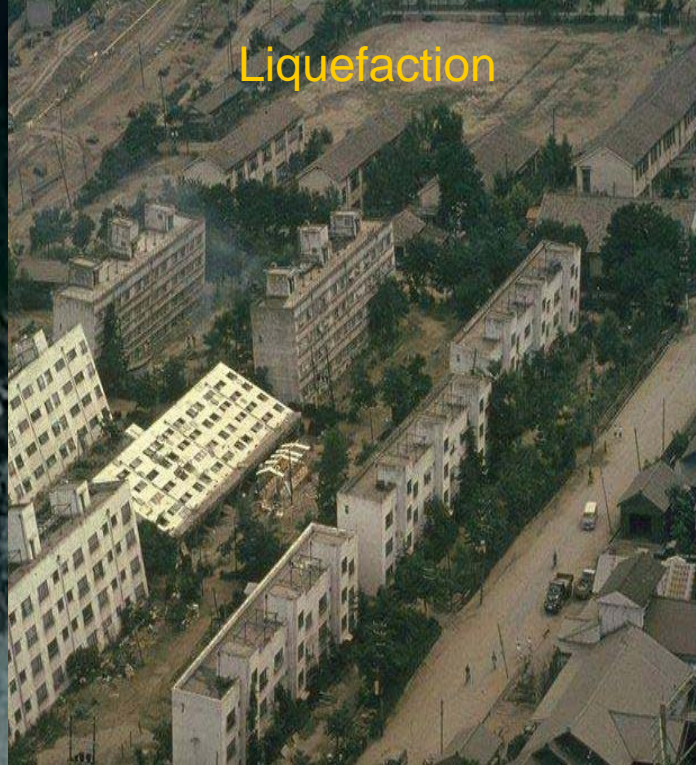
Unreinforced masonry structures



Landslides



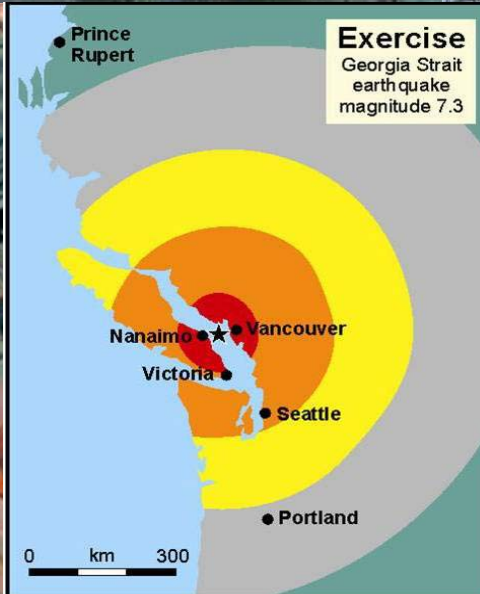
Liquefaction



Power & Communication lines down



Transportation route damage



SCENARIO PART 1 REVIEW

Feedback from Groups

- Questions
- Comments
- Status Reports



** PART 2 **

UPDATE STATUS REPORT (2 hrs post event) = 1130 hrs

Health Resources:

- Paramedics and hospitals are overwhelmed
- Preliminary reports indicate > 500 casualties/HA region, but this number is expected to rise
- Structural damage to healthcare facilities (requiring assessment and/or evacuation)

Water System Damage:

- Water delivery system damaged (no water and/or increased turbidity)

Transportation:

- Victoria downtown core has been cut off from transit
- Victoria bridges - Johnson Street and Bay bridges in Victoria closed until structural assessment completed
- Nanaimo – Bastion Bridge closed for assessment
- Lower mainland bridges (including Knight, Second Narrows, Massey Tunnel, Port Mann) all closed
- BC Ferry terminals are closed for inspection
- Vancouver and Victoria airports are closed
- Many commuters in transit (due to time of the quake)
- Numerous roads impassable due to debris and slumping damage
- Increased congestion on the roads and mass panic has erupted
- Landslides in North Vancouver, Sea to Sky Hwy, Hope and Vancouver Island's East coast have severely impacted these regions

Power Outages:

North Vancouver – 11,000 customers	Vancouver – 118,000 customers
Richmond – 8,000 customers	Nanaimo – 9,000 customers
Victoria – 13,000 customers	CRD – 7,000 customers

Communications outages (telephones and cell phones):





- Lower mainland and southern half of Vancouver Island

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** PART 2 **

RENAL IMPACTS:

Health Resources:

- Paramedics and hospitals are requesting additional resources from outside the impacted region
- Structural damage to healthcare facilities require engineering assessments
- Some healthcare facilities are requesting assistance for evacuation of patients/staff
- Surge of patients requiring renal intervention

Water System Damage:

- Water delivery system damaged (no water and/or increased turbidity)

Transportation:

- Some patients and staff on the lower mainland and Vancouver Island are having difficulty getting to their dialysis facility because their usual routes are closed
- Delivery of essential supplies are anticipated to be significantly delayed and/or may not reach the requesting facility

Power Outages:





- Some home dialysis patients are without power
- Some clinics are without power (and no back up generator is available)

Communications outages (telephones and cell phones):

- Telecommunication infrastructure (land based and cellular phones, as well as, internet service) are overwhelmed and only working intermittently.



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SCENARIO PART 2 REVIEW

Feedback from Groups

- Questions
- Comments
- Status Reports
- Gaps Identified



DEBRIEF

- Did we achieve our objectives?
- What worked well?
- What gaps were identified?
- Are there any suggested initiatives that can be used for resolving gaps?
- What capabilities and/or assets exist that were not widely known prior to the exercise?



EVALUATION & CONCLUSION

- Please fill out a exercise evaluation form
- Next year we are planning a functional level exercise



Thank you!!!

