Nuclear Program Update

Durham Emergency Management

James Kilgour / Kathleen Rose January 17, 2020





Service Excellence for our Communities

Overview

- Program Priorities
- Office Structure
- Plans Notifications
- Evacuation
- Training and Exercises
- EPREV
- Public Alerting
- KI Distribution (out of scope)

Program Priorities



Internal Capacity Building

Training, Exercise, Staffing Plan

Nuclear

Plans, Support Functions, Alerting, Committees, Evacuations

Service Excellence, Continuous Learning and Improvement

Awareness, Education and Outreach

Private and Public

Operational Readiness

Plans, Emergency Support Functions, REOC, HIRA, SOPS

Program Priorities





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Awareness, Education and Outreach

Private and Public

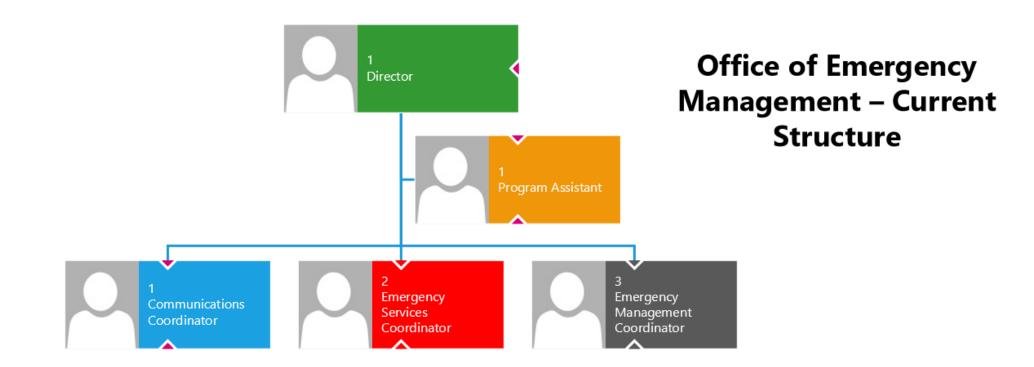
Operational Readiness

Plans, Emergency Support Functions, REOC, HIRA, SOPS



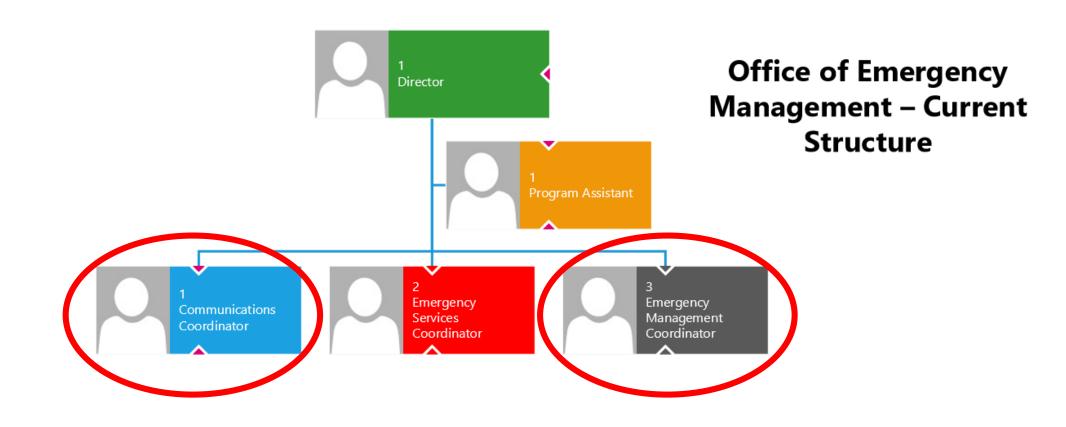
Structure





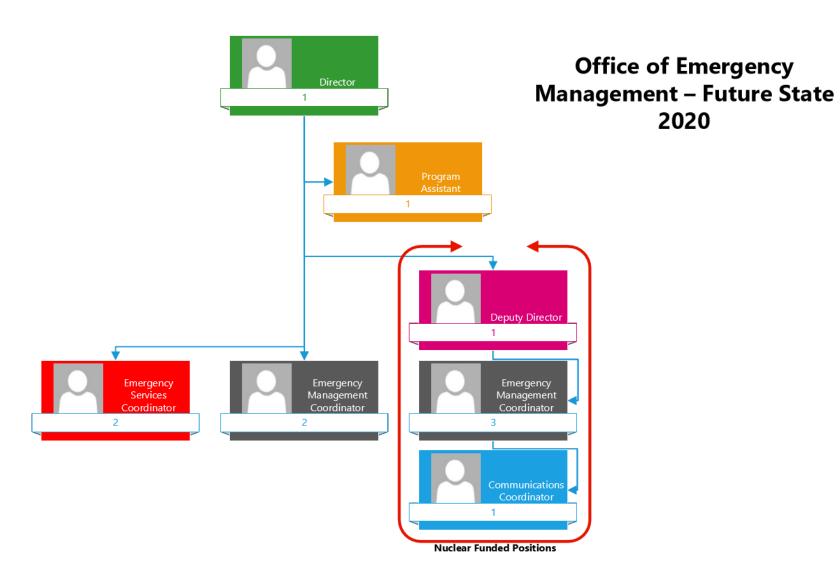
Structure





Structure



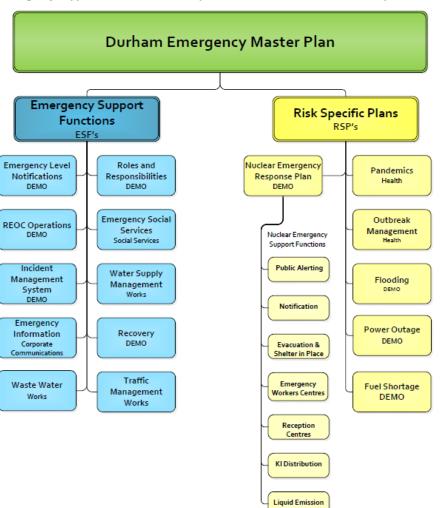


Emergency Plan Structure



Region of Durham - Emergency Plan

Emergency Support Functions and Risk Specific Plans - Identification of Lead Departments

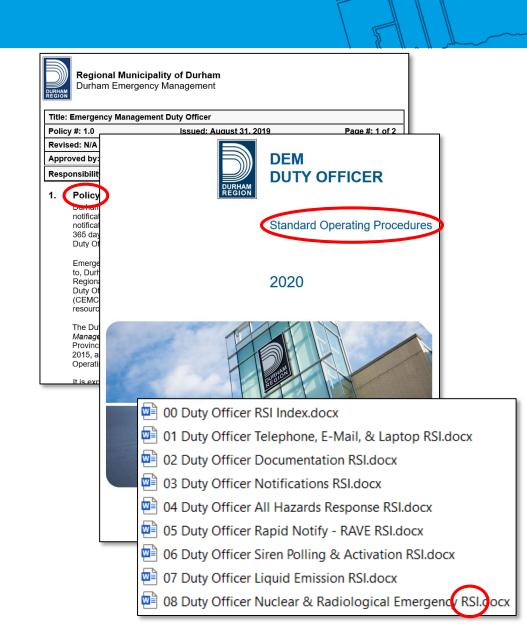


DEM Duty Officer

- 24/7 365 on-call rotation
- Contact point to be notified of large Regional emergencies
- Contact point to be notified of nuclear incidents by OPG/PEOC
- Contact point to request activation of the REOC outside business hours
- Notify Stakeholders (Regional, Municipal, Other):
 - Information only, info + request for resources, info + REOC activation

Duty Officer Re-Development

- Policy Adopted Duty Officer Policy
- SOPs Duty Officer Operating Procedures
- RSIs Step by Step Process & Procedure
- Forms Tools to Document/Record
- Checklists Tools to Log/Track/Audit
- Formalizing the Duty Officer Function



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Example – DNGS Reportable Event



Duty Officer RSI: Nuclear and Radiological Emergencies

Durham Emergency Management (DEM) Coordinators assuming the function of Duty Officer are expected to be fully informed about and capable of performing all duties associated with either a nuclear or radiological emergency, as outlined in the current Durham Nuclear Emergency Response Plan (DNERP), Nuclear Emergency Support Functions (NESFs), and the Provincial Nuclear Emergency Response Plan (PNERP).

The Regional Municipality of Durham is a "Designated Municipality" for both the Pickering Nuclear Generating Station (PNGS) and the Darlington Nuclear Generating Station (DNGS).

1. Notification Categories

There are four categories for initial notification which relate to the severity of event at the Nuclear Generating Station (NGS). The notification categories are:

- Reportable Event: authorities including an emergency onsite
- Abnormal Incident: cause or may lead to physical integrity of t system or containme
- Onsite Emergency: emission of radioactive than 12 hours.
- General Emergency likely within 12 hours

2. Initial Notification for Nuclear Emergencies

See Figure 1: Sample notification process for a notification process example.

- 1. Ontario Power Generation (OPG) sends a Provincial Nuclear Emergency Response Plan Notification (N-FORM-10080-R010) by fax to the Provincial Emergency Operations Centre (PEOC) Duty Desk and Durham Region Police Service (DRPS) Communications within 15 minutes of identifying an event that requires immediate response under the Provincial Nuclear Emergency Response Plan (PNERP).
- OPG calls the PEOC Duty Officer to alert them to the OPG fax and verify it was received.
- DRPS Communications forwards the 'fax by email' to demo ops@durham.ca.
- DRPS Communications Supervisor calls the DEM Duty Officer @ 905-431-6000 to alert them to the OPG 'fax by email' and verify it was received.

Durham Emergency Management Nuclear Notification Process NGS Initial Notification Nuclear Event occurs at If General Emergenc **Immediate Siren** either PNGS or DNGS Initial Notification Fax Notification in 15 Minutes Verification of Initial Notification and DRPS Communications ongoing NGS Conditions Supervisor **PEOC Duty Officer** (E-mail > Phone Call) Immediate Notification Ongoing Feedback Loop Notification of **Provincial Response** Provincial Response **DEM Duty Officer** (Protective Actions) Notification (Phone Call / E-mail) City of Toronto **PNGS DEM Director OPG Head Office** City of Peterborough DNGS Notification of Regional Response CAO **DRPS** Communications Regional District School All 8x CEMCs Specified Boards & Supervisor (Phone Call) **Authorities** Private School Regional DRPS EMO Regional Municipal Regional Fire & Labor Liaisor Council

Fire Dispatc

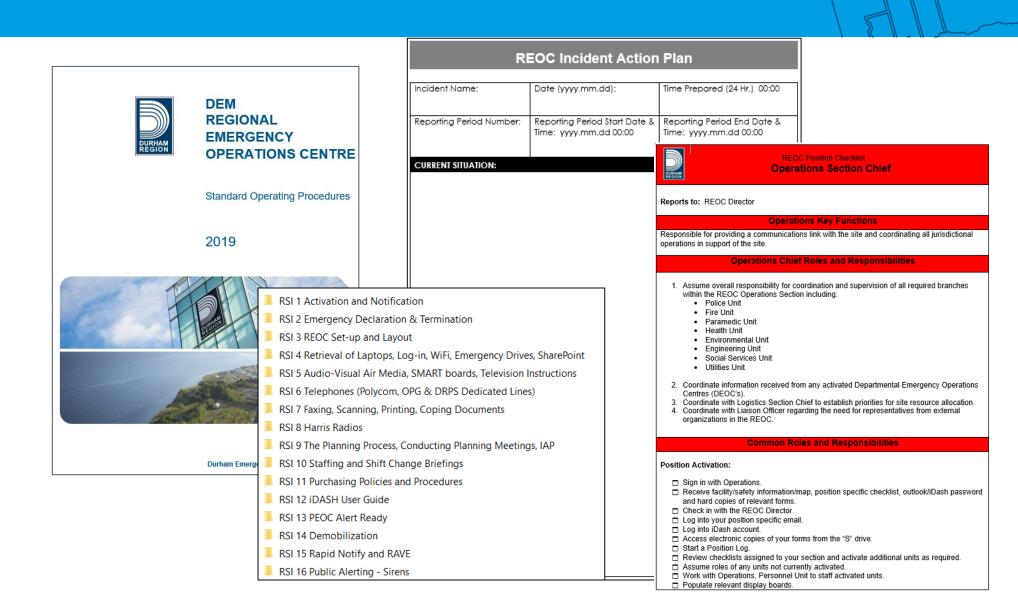
Example – DNGS Reportable vent

Duty Officer resources being utilized:

- Duty Officer Activation Report
- Duty Officer Nuclear & Radiological Emergencies RSI
- Duty Officer Notifications RSI
- Master Contact Directory
- Duty Officer Documentation RSI

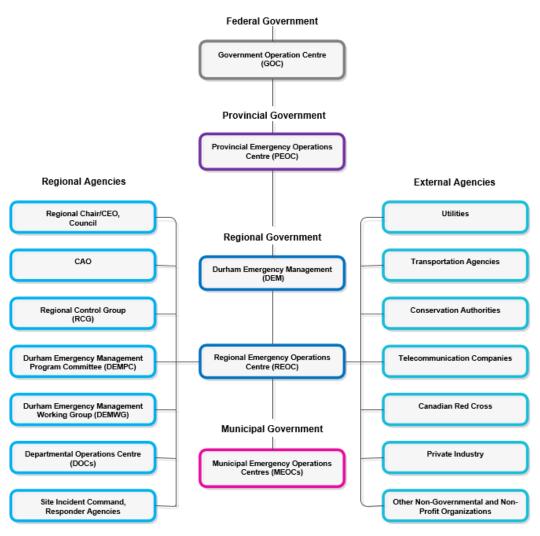
REOC Re-Development

- Policy
- SOPs
- RSIs
- Forms
- Checklists

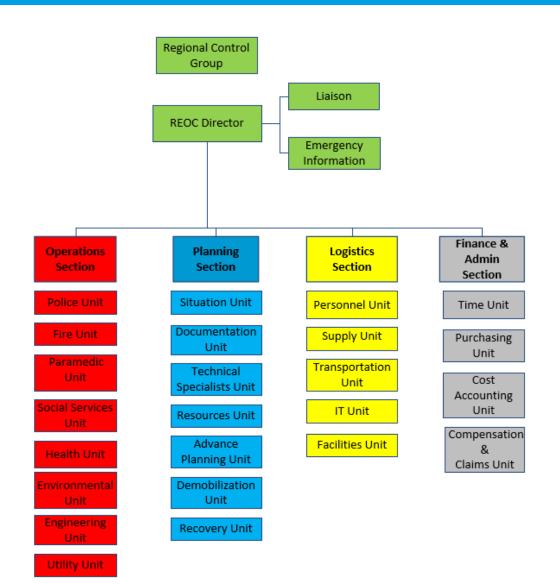




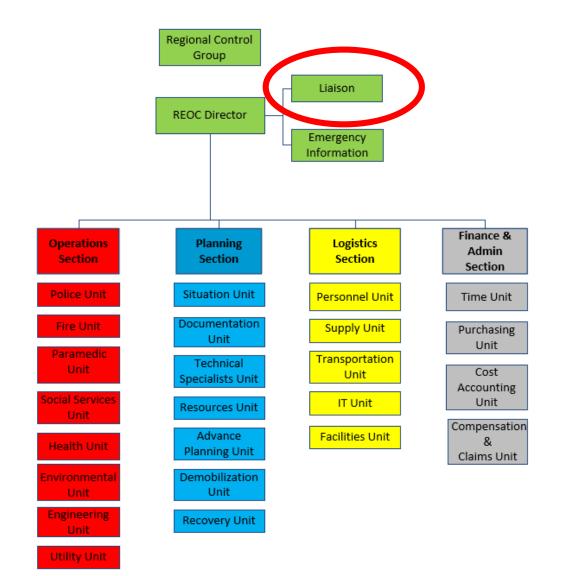
Emergency Response Organization





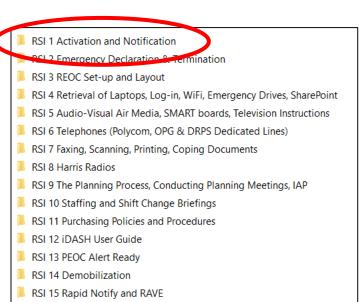




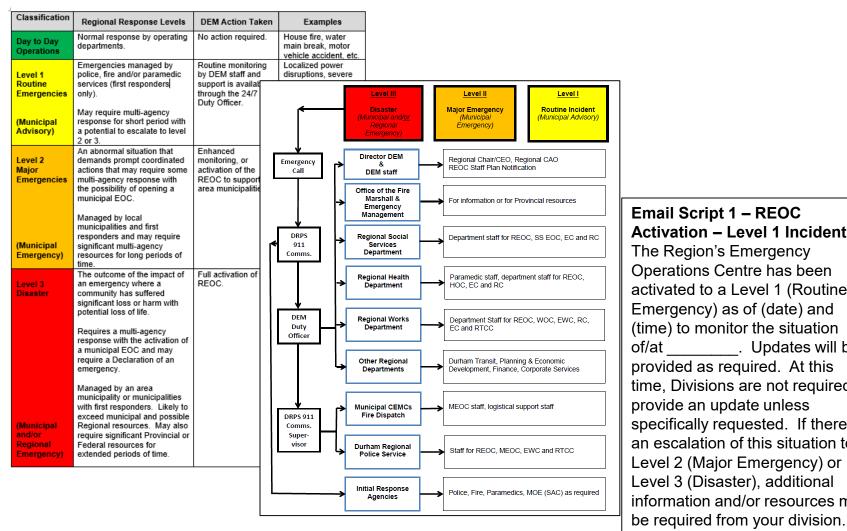


Response Specific Instructions (RSIs)





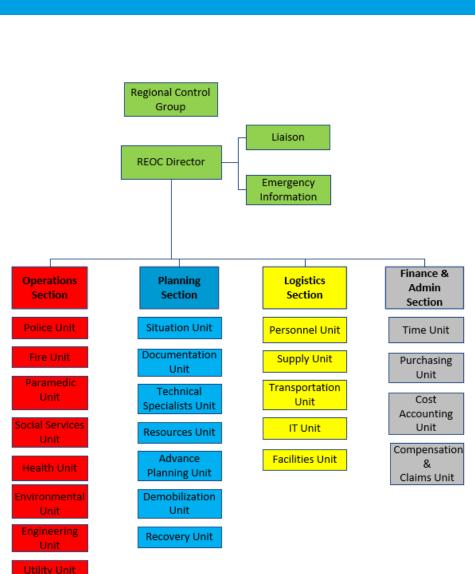
RSI 16 Public Alerting - Sirens

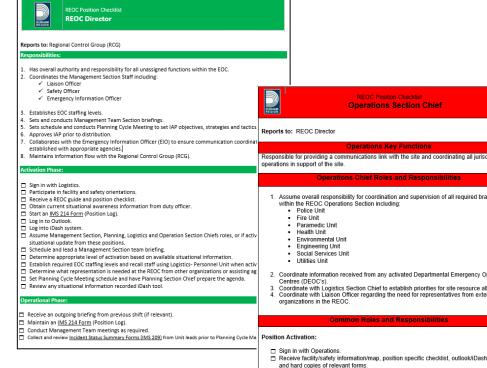


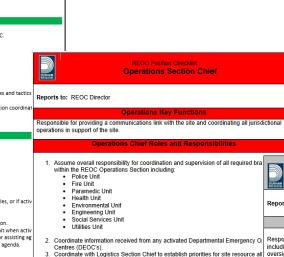
Activation – Level 1 Incident: The Region's Emergency Operations Centre has been activated to a Level 1 (Routine Emergency) as of (date) and (time) to monitor the situation of/at . Updates will be provided as required. At this time. Divisions are not required to provide an update unless specifically requested. If there is an escalation of this situation to a Level 2 (Major Emergency) or Level 3 (Disaster), additional information and/or resources may

REOC Checklists









Common Roles and Responsibilities

Review checklists assigned to your section and activate additional units as requi

organizations in the REOC.

□ Check in with the REOC Director.

Populate relevant display boards.

□ Log into iDash account

Start a Position Log.

☐ Log into your position specific email

Access electronic copies of your forms from the "S" drive.

Work with Operations, Personnel Unit to staff activated units.

Assume roles of any units not currently activated.

Finance & Administration Section - Key Functions

Reports to: Finance & Admin Section Chief or REOC Director

REOC Position Checklist

Compensation & Claims Unit Coordinator

Responsible for overseeing all financial management and business policies and procedures including cost tracking, cost analysis and reporting, administration of procurement contracts and oversight of purchasing processes including expenditure management.

Roles and Responsibilities

- Ensures all documentation related to worker injuries or fatalities within EOC or at sites are completed correctly and forwarded and processed in a timely manner
- Coordinates the investigation and review of property and equipment damage or loss claims relating to an event.

Common Roles and Responsibilities

Position Activation

- Sign in with Logistics.
- Receive facility/safety information/map, position specific checklist, outlook/iDash password
- and hard copies of relevant forms
- Check in with your Section Chief.
- Log into your position specific email. Log into iDash account.
- Access electronic copies of your forms from the "S" drive.
- ☐ Start a Position Log.

Maintain a Position Log.

☐ Gather additional current situational awareness information from completed IAP's, Section

Reports, Unit Reports, display boards, in consultation with REOC members etc.

- Operational Phase:
- Post events on relevant display boards as required. □ Provide information to the Section Chief as necessary
- Attend situation briefings held by the Section Chief.
- Compile and submit Unit Reports as required/directed by the Section Chief.

Collaboration Portal / SharePoint

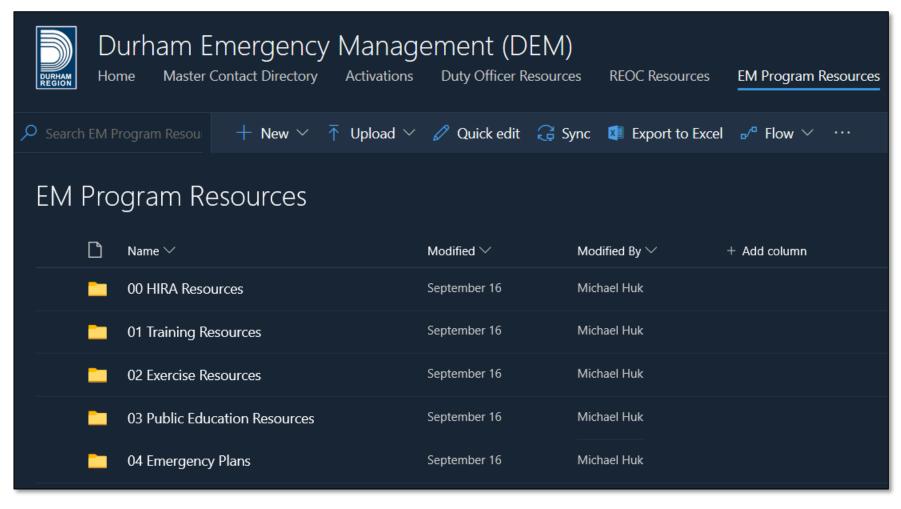
Building Capacity

- SharePoint is a collaborative, cloud based portal
- Potential for DEM to create, organize, and moderate this space
- Shared resources among Regional departments and Municipalities
- Individual and limited access

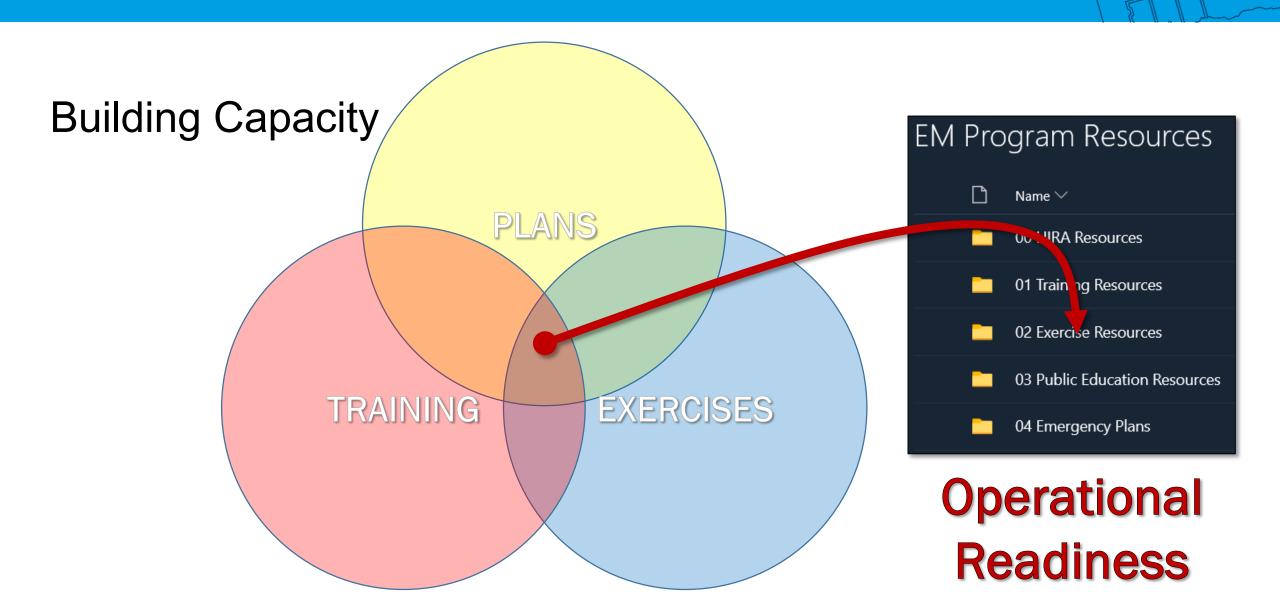


Collaboration Portal / SharePoint

Building Capacity



Collaboration Portal / SharePoint

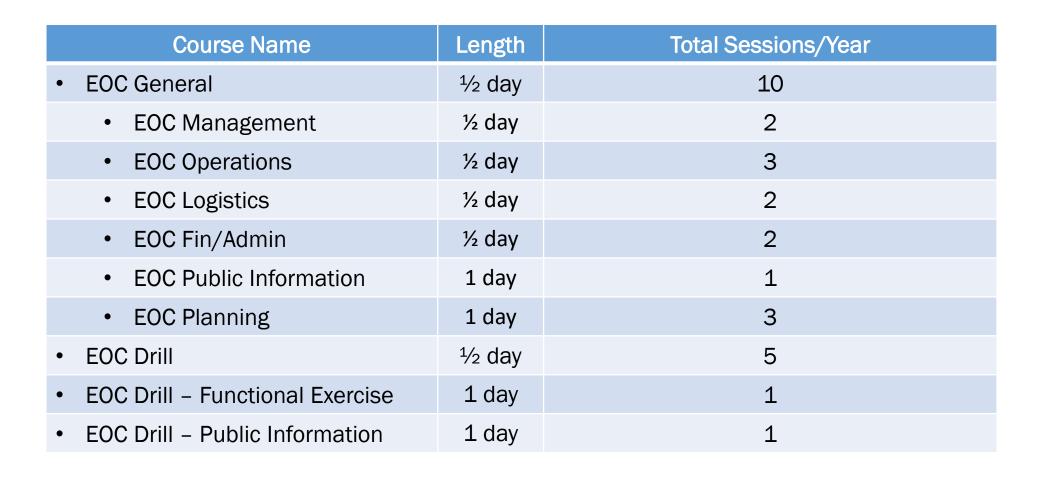


Evacuation

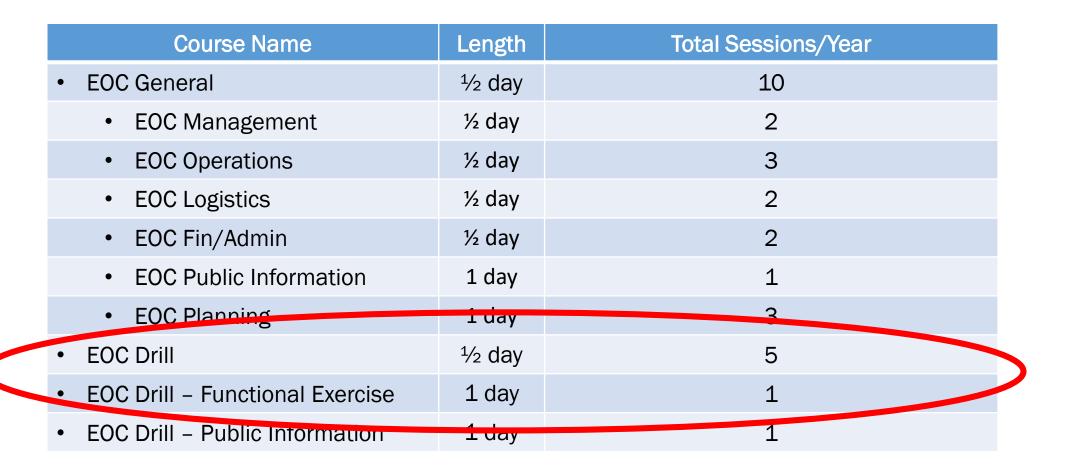
Evacuation

• Goal: Larger strategy for both the road network and displacement issues that goes beyond the current nuclear planning assumptions.

Training and Exercises



Training and Exercises



- International Atomic Energy Association (IAEA) conducting an <u>E</u>mergency <u>P</u>reparedness <u>Rev</u>iew (EPREV)
 - Focused on off-site preparedness

- Federal and Provincial in scope
 - Health Canada is lead for Canada
 - OFMEM is lead for Ontario
 - Region of Durham providing input from local perspective

- June 3 -19, 2019
- International EPR experts from IAEA Member States, as well as a team coordinator and deputy team coordinator from the IAEA Secretariat.
- The EPREV mission took place in Ottawa, as well as in the Provinces of Ontario and New Brunswick,
- The EPREV consisted of a review, prior to the actual mission, of extensive reference materials provided by Canada and, during the mission, of site visits and interviews.
- The EPREV team interacted during the mission with government officials at the federal, provincial and municipal levels, as well as with staff of two NPPs.

The key objectives of this mission were to enhance preparedness and response for nuclear or radiological emergencies, including:

- An opportunity for self-assessment of its activities against IAEA safety standards;
- A review of its emergency preparedness and response arrangements;
- An objective evaluation of its emergency preparedness and response arrangements with respect to IAEA safety standards and guidelines;
- Promoting the sharing of experience and the exchange of lessons learned;
- Providing key staff with an opportunity to discuss their practices with reviewers who have experience with different practices in the same field;
- Recommendations and suggestions for improvement; and

- Report to be released on January 29, 2020. Includes a summary of the action plan.
- Health Canada website

- Key Highlight:
 - "The number of recommendations, suggestions and good practices is in no way a measure of the status of the emergency preparedness and response system. Comparisons of such numbers between EPREV reports from different countries should not be attempted."

Fall 2019 Public Alerting Campaign Results





Service Excellence for our Communities

What is the test?





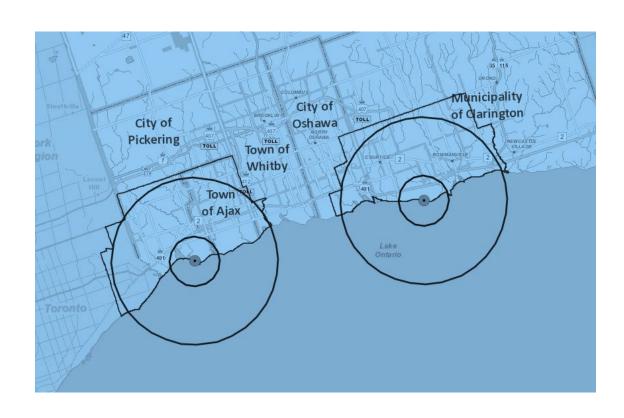
November 25, 2019:

 An autodialing system calls approximately 100,000 landline phone numbers within 10 kilometres of the nuclear generating stations.



November 26, 2019:

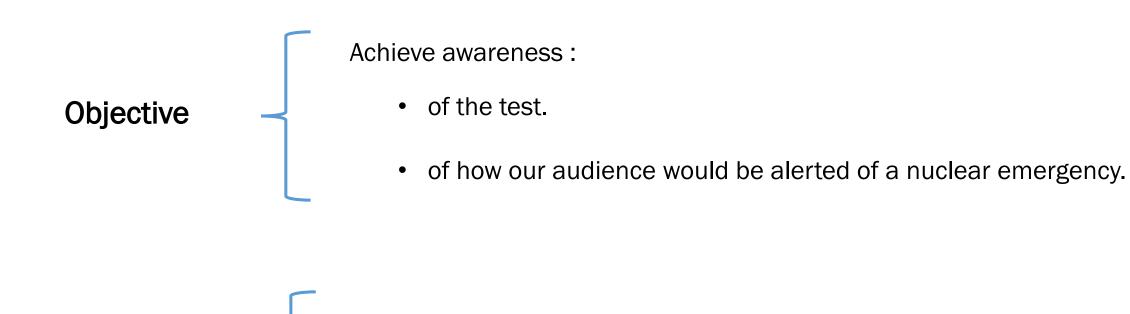
 Outdoor sirens sound within three kilometres of the nuclear generating stations.



Radio, TV and cell phone alerts were tested separately by the Province of Ontario on November 27.

Communications objectives and audience

Audience



People who live or work within 10

Pickering nuclear generating stations.

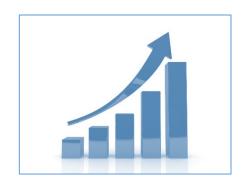
kilometres of the Darlington or

32

Campaign goals



Specific fall 2019 campaign goals:



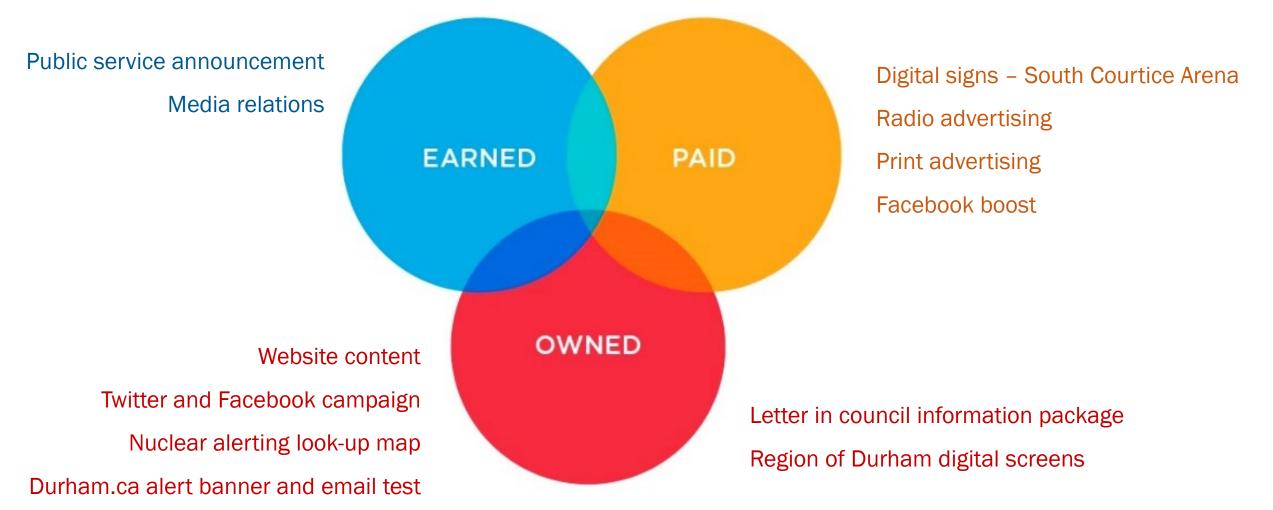
1. Maintain the same high awareness level we achieved in the spring 2019 campaign... *in spite of headwinds*.



2. Ensure we continue to reach our audience across a variety of channels (print, TV, radio, social, online, out of home).

Campaign tactics





Highlights: new for fall 2019









We expanded to new channels

- -Digital signs at South Courtice Arena, Regional HQ
- -New radio and print advertisements

We tested the durham.ca banner and email alert

The banner pops up on durham.ca and is sent by email to subscribers.

We launched a new look-up map

Enter your address and find out how you would be alerted of a nuclear emergency.

We revised the worst-performing social media posts

The worst post of the last campaign achieved a 13 per cent increase in impressions and a 120 per cent increase in engagement.

Our Results

How we measured our results

1 impression = 1 view (or listen) of a piece of content

Impressions are a proxy measure for awareness, and a standardized way to measure earned, paid and owned media.















How did we do?

Goal #1: Maintain the same high awareness level we achieved in the spring 2019 campaign.

Spring 2019 overall results

2,020,062

impressions

Fall 2019 overall results

3,066,015

impressions

Year over year results

Includes owned, earned and paid:

Item	Impressions	Media Stories	Success factors
Spring 2018	1,121,944	8	Baseline
Fall 2018	1,985,987 ↑ 77% increase over spring 2018	16	Rewrote campaign materials
Spring 2019	2,020,062 ↑ 1.7% increase over fall 2018 ↑80% increase over spring 2018	18	New images, adjusted campaign timing, revised worst-performing social posts
Fall 2019	3,066,015 ↑52% increase over spring 2019 ↑ 54% increase over fall 2018 ↑173% increase over spring 2018	13	Increased advertising to limit impact of newspaper closures, revised worst-performing social posts, misc. tweaks, and luck

Social impressions vs. media impressions





	Spring 2018	Fall 2018	Spring 2019	Fall 2019
Social (owned)	78,240	110,400	169,547	176,699 ↑ 4.2% increase over spring 2019 ↑ 125% increase over spring 2018
Media Purham Region.com (earned) DURHAM RADIOINC	362,000	1,193,883	1,168,811	1,488,923 ↑27% increase over spring 2019 ↑311% increase YOY

These numbers don't include our paid advertising.

Media coverage

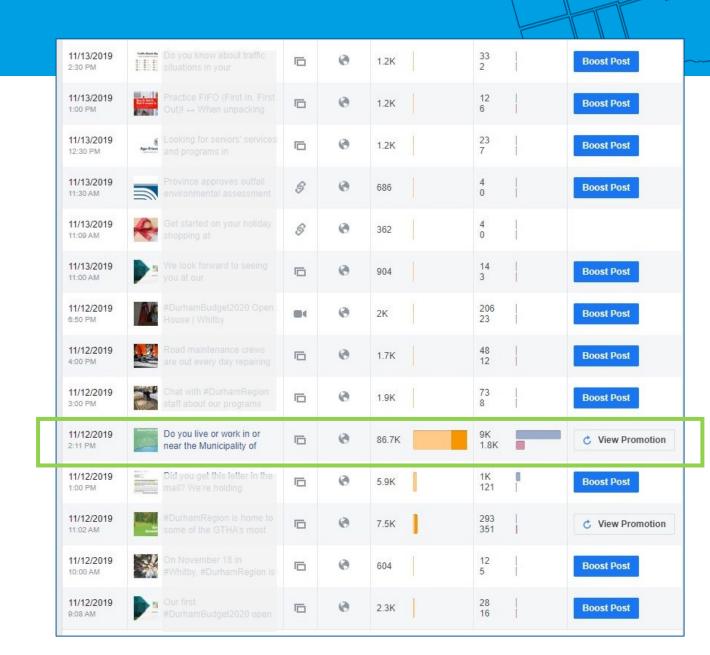
- 95 per cent of media coverage included a link to our website*.
- 98 per cent of media coverage included an image.
- 11 per cent of media coverage included a spokesperson quote.

Calculated based on story impressions for earned media stories only.

*Omits media stories where this data could not be established.

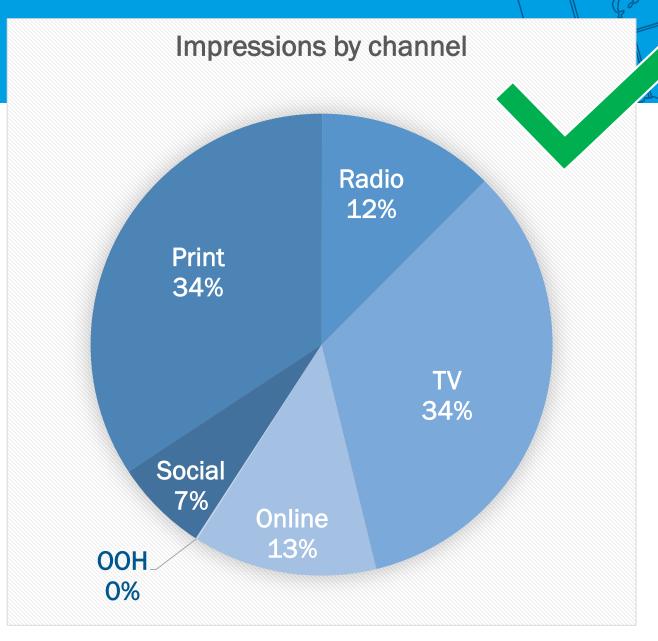
Social media highlights

- Very successful campaign with a high reach.
- Facebook posts are consistently among the Region's top-performing.
- Twitter post from spring campaign was the Region's top post of 2019.
- Twitter post from fall campaign is in the top 10 of 2019.



How did we do?

Goal #2: Ensure we continue to reach our audience across a variety of channels (print, TV, radio, social, online, out of home).

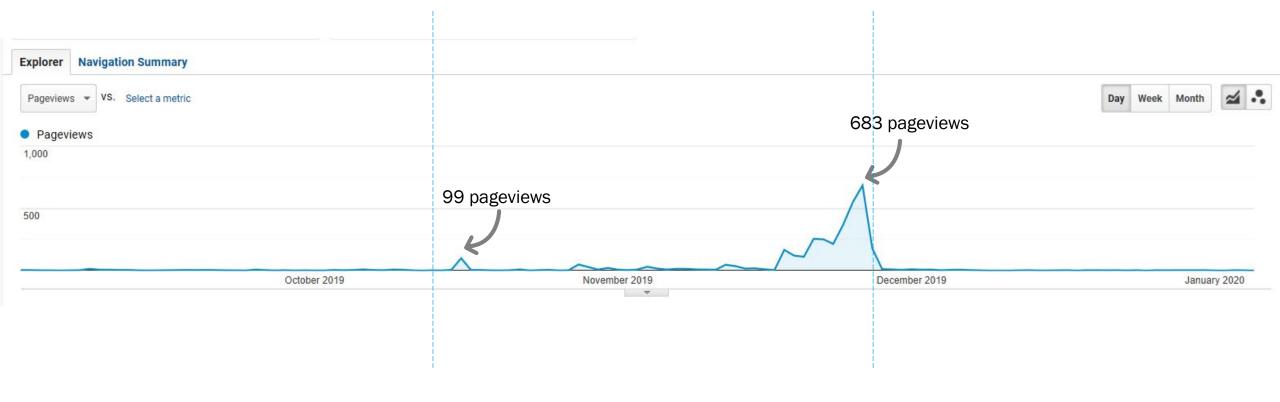


Website

Website visits: durham.ca/NuclearPreparedness







Website visits: durham.ca/AlertMap





Nuclear Preparedness - Durham Region

Find Out How You Will be Alerted of a Nuclear Emergency

There are two nuclear generating stations in Durham: Darlington and Pickering. The Region of Durham is responsible for operating a nuclear public alerting system, which would notify you in the unlikely event of an emergency at one of the stations. The province issues <u>Alert Ready</u> text message emergency notifications. Look up your address to see the alerts you would get at your home or workplace.

How to use the map:

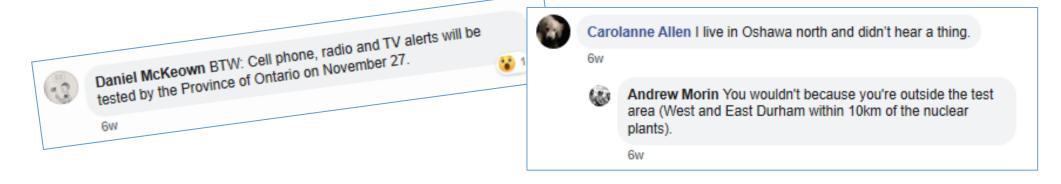
- Type in your house number and/or street name (e.g., 605 Rossland).
- Press enter or wait for the map to provide you with options.
- Select your address from the drop-down list.
- Or click a location on the map.



Successes and Opportunities

Successes

- ✓ Increased impressions
 By 54 per cent year over year, and by 52 per cent over spring 2019.
- ✓ Prevented negative comments on media stories (and social)
 By including context for landline phone calls, and information about Alert Ready.
- ✓ Our audience helped us correct misinformation On social media, we saw users jump in to correct those who posted misinformation.



Opportunities



After each campaign, we look for opportunities to improve.

- Run public education programming alongside the test

 There is still misinformation in the community to correct, but we can't fit any more information into this communications campaign without our main messages getting lost.
- Update our advertising templates

 Going forward, print and digital advertising will need to play a bigger role in this campaign. Updated templates would help our message stand out and be consistent across all channels.
- Share photography or video b-roll with media outlets

 Almost all of our media coverage included images, but they were mostly generic images of the nuclear stations that the outlets already had on file. We have an opportunity to supply images that would better illustrate the information after all, we know many people skim written articles and just look at the pictures.

Thank you!

Visit durham.ca/alertmap to find out how you would be alerted of a nuclear emergency.