



City of Richmond

Report to Committee

To: Community Safety Committee **Date:** April 16, 2019
From: Cecilia Achiam **File:** 09-5126-01/2019-Vol 01
General Manager, Community Safety
Re: **Emergency Programs Quarterly Activity Report – First Quarter 2019**

Staff Recommendation

That the staff report titled “Emergency Programs Quarterly Activity Report – First Quarter 2019”, dated April 16, 2019, from the General Manager, Community Safety, be received for information.

Cecilia Achiam
General Manager, Community Safety
(604-276-4122)

| REPORT CONCURRENCE | |
|--|---------------|
| REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE | INITIALS: |
| APPROVED BY CAO | |

Staff Report

Origin

This report provides Council with an update on Emergency Programs (EP) activities. EP is reporting on its activities in support of its mandate to maximize the protection of life, public infrastructure, private property and the environment in the event of a major emergency or disaster.

This activity report for EP provides information on each of the following areas:

1. Community Resilience
2. Emergency Management Plans
3. City of Richmond Resilience
4. Emergency Social Services (ESS) Response

Analysis

Community Resilience

Richmond Resilient Communities Program (RRCP)

The RRCP program is designed to provide residents with the tools and knowledge to prepare themselves, their families and their communities to be resilient during an emergency of any size.

- The first quarter of 2019 saw the rollout of the two-hour, single session workshop. In total, three workshops were facilitated in the communities of Cambie, West Richmond and Steveston; and three workshops (in Cambie and Hamilton) were cancelled due to low or no registration.
- Two additional sessions were conducted by request. The first session was presented to a Strata Association in Steveston and the second session was done in collaboration with Richmond Fire-Rescue to a seniors housing complex in West Richmond. A total of 84 residents attended the RRCP workshops in the first quarter of 2019.
- Multiple meetings have been facilitated with Area Coordinator's and community groups such as the Broadmoor Neighbourhood Association (BNA), to discuss ways to increase attendance and engagement at workshops. Common themes discussed included the potential language barrier and the need for increased promotion and marketing. In response, concerted efforts have been put forth to complete a Mandarin translation of the RRCP workshop and to pilot it in the second quarter of 2019. Staff are currently exploring additional ways to attract attendees to workshops.

Council is invited to attend any of the following upcoming workshops:

- Facility: Hugh McRoberts Secondary School
Dates & time: May 22, from 6:30-8:30pm

- Facility: Richmond Secondary School
Dates & time: May 30, from 6:30-8:30pm
- Facility: City Centre Community Centre
Dates & time: June 5, from 6:30-8:30pm
- Facility: South Arm Community Centre
Dates & time: June 27, from 6:30-8:30pm

The ‘Beyond the Workshop’ series enables residents to attend courses to gain additional knowledge/skills in emergency preparedness. These skills can be used in everyday life to improve the overall perception of safety and preparedness in the community. Staff coordinated the delivery of:

- Emergency First Aid course on February 23, 2019; and
- Rapid Damage Assessment course on March 30, 2019.

Kwantlen Polytechnic University (KPU) Partnership

In collaboration with KPU, staff developed questionnaires to conduct an in-depth analysis of the effectiveness of workshop content and to understand public perceptions as it relates to disaster readiness and emergency preparedness. Preliminary results from the RRCP workshops evaluation have been summarized in attachment 1.

RichmondBCAlert

Emergency Programs staff and volunteers continue to promote registration for the City’s Emergency Notification System, RichmondBCAlert, at public events. Table 4 outlines the quarterly signups.

Table 4: RichmondBCAlert Signups

| | Q1 2017 | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 | Q4 2018 | Q1 2019 |
|--------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|
| Owner | 135 | 153 | 54 | 60 | 431 | 87 | 134 | 98 | 45 |
| Tenant | 56 | 49 | 13 | 38 | 269 | 48 | 40 | 72 | 25 |
| Total | 191 | 202 | 67 | 98 | 700* | 135 | 174 | 170 | 70 |

*Close to 50% of the total registrations received following EMBC notification of the large earthquake and tsunami warning near Kodiak Alaska on January 23, 2018.

- Promotion of RichmondBCAlert signups for the first quarter included digital transit ads in March and a 1-person emergency kit draw through ongoing social media posts.

Public Events

Best practice has shown that residents that are informed and prepared are more resilient to the effects of an emergency and able to contribute to response and recovery. Emergency Programs staff and volunteers build a culture of preparedness by engaging with the public regularly to share emergency preparedness information.

- On February 6, 2019, Emergency Programs staff hosted a community engagement event in collaboration with London Drugs, Richmond Fire-Rescue and the Smart Cities Challenge Project Office. The focus of the event was to highlight how resilient communities are built through collaboration and partnerships.

Emergency Management Plans

Emergency Programs staff regularly review emergency plans with their operational stakeholders to ensure the plans are relevant in the event of an emergency or disaster. Staff are reviewing:

- Hazard Risk & Vulnerability Analysis (HRVA): Staff reviewed numerous consultant proposals to complete an update to the City's HRVA. A consultant has been selected and is in the procurement process. It is anticipated that the HRVA will be completed in the fourth quarter of 2019.
- Evacuation Plan: an update to the Evacuation Plan was completed in 2018. An orientation for key stakeholders of the plan has been scheduled for the second quarter of 2019. During this orientation, an overview of the plan, its purpose, scope and recent changes will be presented to relevant stakeholders.

City of Richmond Resilience

Staff Training

All staff play a role in emergency management. Working with the operational City departments, Emergency Programs will continue to facilitate training and exercises to provide Staff with the necessary skills and experiences to effectively support the City and its residents during events and emergencies of any size.

- On January 15, 2019, EP delivered a Risk Management Officer orientation session for all Emergency Operations Centre staff that may be called on to perform risk assessments in an emergency. This included many new members of the Law Department.
- Through the remainder of the first quarter, EP staff planned and scheduled Emergency Operations Centre, Incident Management System, and Emergency Social Services training to be delivered to City Staff that may play a role during an emergency. This training is scheduled to be delivered early in the second quarter of 2019.
- After staff training, a tabletop exercise simulating a downed aircraft and the evacuation of a city neighbourhood has been scheduled. This will allow recently trained staff to work with key response partners to discuss how they would approach a crash, including the

activation and utilization of the recently updated Evacuation Plan. This exercise is scheduled to take place immediately following the above staff training and Evacuation Plan orientation.

Partner Management

Throughout the first quarter of 2019 Emergency Programs coordinated with numerous response partner agencies to create and maintain effective working relationships and engagement procedures.

- On January 22, 2019, EP Staff participated in a review of the second version of the Greater Vancouver Incident Response Plan. This plan is a key regional response plan outlining the roles, responsibilities, and procedures for response in the event of a significant marine emergency. This plan was activated during the Ledcor Capsized Tug incident in 2018, and lessons learned from that incident were incorporated into the second version update.
- EP Staff liaised with operational leaders at ProTrans (Canada Line), Metro Vancouver Transit Police (MVTP), and BC Sheriffs to identify opportunities to improve communications and protocols for a response.

Emergency Social Services Response

Emergency Programs responded to one emergency where four individuals were evacuated and services were provided.

The four residents were provided with services on behalf of the Province which included temporary accommodations, meals, clothing and basic incidentals, while the evacuees worked to identify and secure alternate accommodations or while they waited for their residences to be cleared of harmful smoke.

Financial Impact

None.

Conclusion

Emergency Programs staff and volunteers continue to engage with the Richmond community to deliver personal and community preparedness, and resiliency information while continuing to promote the RichmondBCAlert System.



Norman Kotze
Manager, Emergency Programs
(604-244-1211)

Att 1: KPU Richmond Resilient Communities Program Evaluation - Preliminary result

Richmond Resilient Communities Program Evaluation

PROGRESS REPORT MARCH 30, 2019

Prepared by Andrea Mah & Dr. Kyle Matsuba



PROGRESS REPORT: MARCH 30, 2019

Introduction

This progress report presents findings from the ongoing evaluation of the Richmond Resilient Communities Workshops. These workshops are held in community centers, schools, and other public spaces and are intended to help people become informed about and prepared for emergencies of all sizes. The purpose of the evaluation is to see whether the workshop is able to help people become more knowledgeable about and behaviorally prepared for emergencies.

This report presents findings from workshops held from January 17th 2019 – March 25th, 2019. Including:

- East Richmond Community Hall (Jan 17)
- Copper Sky East (Feb 19)
- Hugh Boyd (March 6)
- McMath (March 13)

Methods

Data was collected using paper-and-pencil questionnaires handed out to participants immediately before and immediately after participating in the workshop. REMO volunteers and staff facilitated this. Then, Andrea collected the physical forms and entered the data into spreadsheets. Additionally, a 1-month follow-up survey is sent to participants via email, and is completed using Qualtrics, an online survey platform.

The surveys include measures of participants' perceptions of risk likelihood and severity, feelings of self-efficacy (i.e. confidence in ability to respond to emergencies), degree of responsibility they feel for preparing, their knowledge of emergency preparedness, and their current levels of preparedness.

Results

SUMMARY:

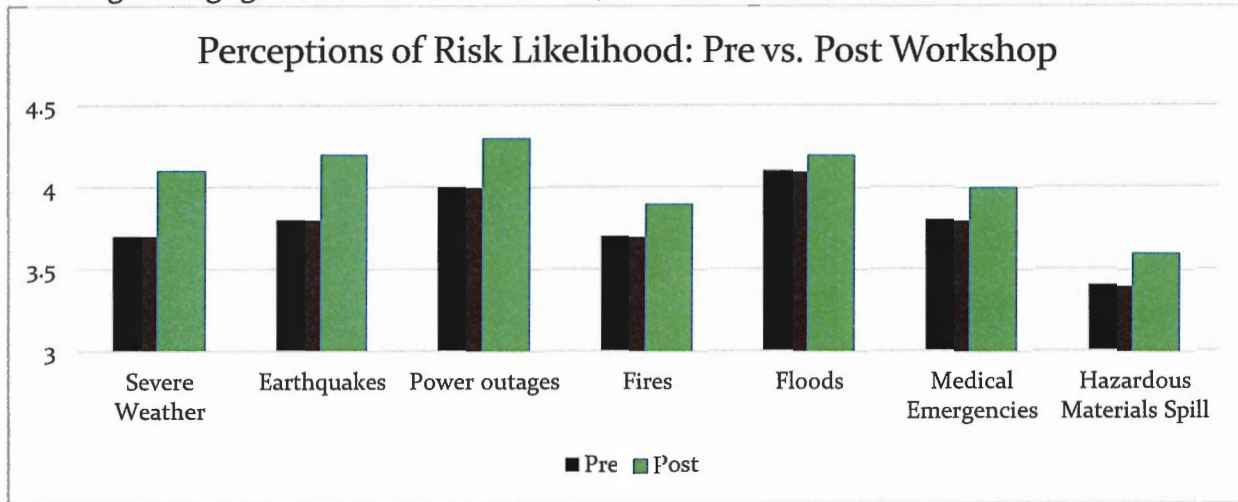
Following the workshop, we see non-significant increases overall in perceptions of risk likelihood and risk severity. Perceptions of risk severity and likelihood are generally high. There are some significant increases in knowledge of how to prepare for an emergency, and in knowing one's role in an emergency. Although the majority of participants enter the workshop with the feeling that they have the knowledge they need to prepare, we see increases in knowledge immediately following the workshop.

The majority of participants report a desire to "learn more" and to "get prepared" as the main reason they attended the workshop. Participants learned about the workshop from a variety of sources, including

online (Facebook, city of Richmond website), the Richmond leisure booklet, friends/family, school, and bus stop advertising.

RISK & EFFICACY PERCEPTIONS

Participants were asked to report how likely they were to experience certain risks, each of which they rated 1 (not at all likely) to 5 (very likely). Statistically significant increases in perceptions of the likelihood of severe weather were observed. All other differences between the pre- and post-test were non-significant. Overall, participants thought it was likely that these risks would occur. For full summary of average ratings given to each individual risk, see table 1 below.



Participants were asked to report how severe the impact would be to them if certain risks were to occur. Each risk was rated from 1(not severe at all) to 5(very severe). There was a statistically significant increase in the perceived severity of power outages, all other changes in risk severity perceptions were not significant. Overall, participants believe these risks to be fairly severe.

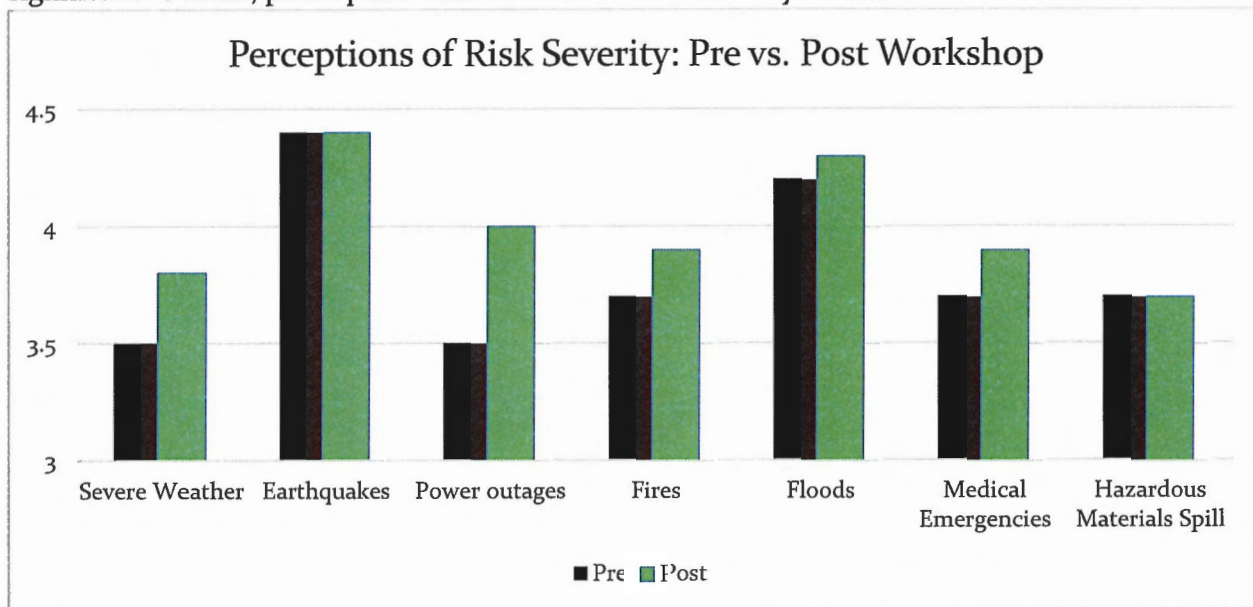


Table 1. Perceptions of Risk Severity, Risk Likelihood, and Self-Efficacy Before and After the Workshop

| | | Severe Weather | Earthquakes | Power Outages | Fires | Floods | Medical Emergencies | Hazardous Materials Spill | TOTAL (Average) |
|-----------------|------|----------------|-------------|---------------|-------|--------|---------------------|---------------------------|-----------------|
| Risk Likelihood | Pre | 3.7* | 3.8 | 4.0 | 3.7 | 4.1 | 3.8 | 3.4 | 3.78 |
| | Post | 4.1* | 4.2 | 4.3 | 3.9 | 4.2 | 4.0 | 3.6 | 4.0 |
| Risk Severity | Pre | 3.5 | 4.4 | 3.5* | 3.7 | 4.2 | 3.7 | 3.7 | 3.8 |
| | Post | 3.8 | 4.4 | 4.0* | 3.9 | 4.3 | 3.9 | 3.7 | 4.0 |
| Self-Efficacy | Pre | 3.2 | 2.8 | 3.5 | 3.2 | 2.8 | 3.2 | 2.7 | 3.0 |
| | Post | NA | NA | NA | NA | NA | NA | NA | NA |

Mean ratings of risk likelihood, risk severity, and ability to respond to risks before and after the workshop. Scales ranged from 1-5. Total sample included 53 participants. Post measures were collected immediately after workshop participation. *Difference was statistically significant at $p < .05$.

RELIANCE, RESPONSIBILITY, & KNOWLEDGE:

Participants were asked how much they expected to rely on various groups after emergencies. People expect to rely most on First Responders, followed by the City of Richmond and neighbours. People generally felt that they were personally responsible for preparing for an emergency, and that the City of Richmond was also responsible for preparing them for an emergency. After participating in the workshop, participants felt significantly more knowledgeable in terms of being able to prepare themselves for an emergency, and felt more knowledgeable about their own role in an emergency. See table 2 for full summary of results.

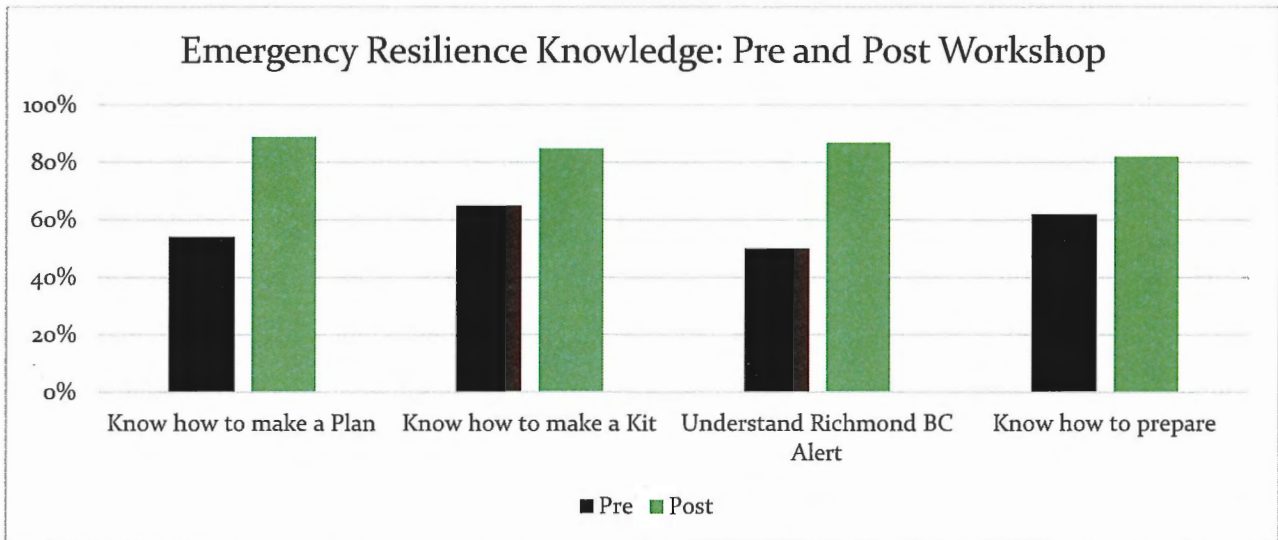
Table 2. Reliance, Responsibility, and Knowledge Before and After the Workshop

| | Pre-test | Post-test |
|------------------------------|----------|-----------|
| Reliance on Neighbours | 3.0 | NA |
| Reliance on First Responders | 3.6 | NA |
| Reliance on City of Richmond | 3.4 | NA |
| Personal Responsibility | 4.6 | NA |
| City Responsibility | 3.3 | NA |
| Know How to Prepare | 3.8* | 4.4* |
| Know Role in Emergency | 3.6* | 4.4* |

Mean ratings of reliance, responsibility, and knowledge before and after the workshop. Scales ranged from 1-5. Total sample included 53 participants. Post measures were collected immediately after workshop participation. *Differences were significant at $p < .05$

KNOWLEDGE ABOUT PREPAREDNESS

There are statistically significant increases in knowledge of how to make a plan, in understanding of Richmond BC Alert, and in knowledge of how to prepare. Changes in knowledge of how to make a kit are non-significant. See table 3 for summary of results.



Percentage of participants who report some level of agreement (4 or 5 on a scale of 1-5) that they have knowledge about how to prepare, how to make a plan, how to make a kit and of RBCA.

| | Pre-test | Post-test |
|---------------------------|----------|-----------|
| Know how to make a Plan | 54%* | 89%* |
| Know how to make a Kit | 65% | 85% |
| Know of Richmond BC Alert | 50%* | 87%* |
| Subscribe to RBCA | 35% | NA |
| Know how to prepare | 62%* | 82%* |

*differences are significant at the $p < .05$ level.

FEEDBACK ON THE WORKSHOP

94% of people would recommend the workshop to family and friends.

When asked: *Is there anything that was not covered? Or can you suggest a way to make the workshop more effective?* There were a variety of responses:

- doing community emergency mapping through google maps and making it accessible to public
- Need more focus on how we are alerted to an emergency and then how we receive updates. Need to emphasize need to have access to a battery/radio
- Great! Wonderful session. Likely less time with intro as we are all here because we recognize the need. Gives time for other

- long term lifelong resilience plan, for long slow emergency such as climate change. Well-presented and organized. Offer online community for participants to share ideas afterwards and connect with neighbors who took this training
- Help us visualize what an emergency shelter would look like & example for layout of CR facility
- Play some videos to make it fun
- Services in community other than city (nonprofit etc.) to be familiar with in case of emerg/disaster? (food banks, etc.)