



City of Richmond

Report to Committee

To: Community Safety Committee

Date: March 14, 2022

From: Tim Wilkinson
Fire Chief

File: 09-5375-03/2022

Re: Richmond Fire-Rescue Monthly Activity Report – February 2022

Staff Recommendation

That the staff report titled “Richmond Fire-Rescue Monthly Activity Report – February 2022”, dated March 14, 2022, from the Fire Chief, be received for information.

Tim Wilkinson
Fire Chief
(604-303-2701)

Att. 1

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER	
SENIOR STAFF REPORT REVIEW	INITIALS:
APPROVED BY CAO	

Staff Report

Origin

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

Analysis

Emergency Programs

In House City Staff Training and Development

Emergency Programs staff created a facilitated incident command systems (ICS) workshop that is available to all City staff on request to promote a Culture of Emergency Preparedness amongst City staff. We delivered the first of these workshops to Public Works staff. The goal of the workshop was to develop skills through scenario-based exercises and be able to apply ICS to every day events. In addition, the training provided staff with the ability to inter-operate with RFR, RCMP and other City departments who utilise the ICS system for command and control and large event management.

Staff presented an update on the status of current emergency planning, public engagement and education programs that are available to the Community Social Development (CSD) team. The goal of the presentation was to work with the CSD team to align programming and support each other in the delivery of services.

Public Education

Staff facilitated an online Emergency Preparedness Workshop for the Hamilton Community Centre where residents learned how to keep their households safe before, during and after an emergency.

Canadian Red Cross National Inclusive Resiliency Project Update

Staff presented emergency planning information and supported the Seniors Wellness Clinic at the Minoru Centre for Active Living. During this in-person engagement opportunity, staff provided answers to attendees during the 'Ask the Expert' session that focused on earthquakes. This engagement provided the opportunity to promote Canadian Red Cross' surveys as well as the City's Emergency Notification System registrations.

Training and Public Education

During February 2022, fire-training staff delivered educational activities and programs including Fire Cause and Origin, Technical Rescue, Frontline Leadership, Fire Service One, Incident Command System 100 and 200 and Wildfire Structure Protection Program (Wildland Fire Fighting).

During February 2022, Public Education staff delivered educational materials for each day of Burn Awareness Week, which ran from February 6 to 12, 2022. Videos were created each day of the week promoting burn awareness and safety. A video was also created to showcase the BC Professional Fire Fighters Burn Fund and what they offer burn survivors from all over BC.

Public Education staff also facilitated the wearing of pink epaulettes for RFR staff to show their support for Pink Shirt/Anti-Bullying Day.

Emergency Response

Richmond Fire-Rescue staff continue to respond to calls for service incorporating Health Orders issued by the Province to combat the COVID-19 pandemic, as well as provide regular services to the community.

Richmond Fire-Rescue's goal is to respond to incidents in a manner where loss of life, reduction of property damage and protection of the environment is mitigated. In February 2022, there were a total of 685 reported incidents, representing a 19 per cent increase in incidents from February 2021 (Attachment 1).

Richmond Fire-Rescue continues to experience increases in medical call responses due to changes in the Provincial Health Orders and Medical Health Officer's direction. The increase in February 2022 is a result of the gradual return to normal levels of service of medical event types and responses to medical calls. RFR continues to monitor all activities to identify and create programs to incorporate emerging trends.

The average time on scene for RFR crews was 31 minutes, which was higher than the 29 minutes that was recorded in 2021. The time spent on scene can vary due to the nature and severity of each incident.

Table 2: Total Incidents - February 2022

	Totals (2022)	Percentage Change from February 2021	Number Change from February 2021 to 2022	5 Year Average for February
Alarm Active No Fire	109	- 4	-4	124
Explosion	1	-	+1	0
Fire	27	+4	+1	22
Haz-Mat	6	- 60	-9	10
Medical	353	+48	+114	327
MVI	57	+19	+9	74
Public Hazard	6	-	0	8
Public Service	81	-	0	68
Response Cancelled/Unfounded	40	-14	-6	56
Specialized Transport	3	+50	+1	3
Tech Rescue	2	+100	+1	1
Totals	685	+19	+108	692

In February 2022, there were 27 fire incidents which were reported to the Office of the Fire Commissioner representing a four per cent increase from February 2021. The average number of fires reported in February over the last five years is 22.

Richmond Fire-Rescue's emergency fire response goal is to contain a fire to the room of origin. The room of origin standard is especially important in terms of fire loss and damage, which increases significantly once a fire extends beyond the room of origin.

Fire damage and property losses during February 2022 are estimated at \$221,187. This total includes \$67,500 for building/asset loss and \$153,687 for content loss. The total building/asset and content value at risk was estimated to be \$8,309,487 and the total value preserved from damage was \$8,088,300. These numbers translate to 97 per cent of value protected (Table 2); this value is lower than the value observed in 2021; 99 per cent.

Table 3: Fire Incidents By Type and Loss Estimates - February 2022

Incident Type Breakdown	Incident Volume	Estimated Building/Asset Value (\$)	Estimated Building/Asset Loss (\$)	Estimated Content Value (\$)	Estimated Content Loss (\$)	Estimated Total Value Preserved (\$)
Residential: Single family	1	2,359,000	1,500	-	-	2,357,500
Multi family	4	5,276,000	-	11,700	1,700	5,286,000
Commercial/Industrial	3	468,000	50,000	150,000	150,000	418,000
Outdoor	18	-	-	28,787	1,987	26,800
Vehicle/Vessel	1	16,000	16,000	-	-	-
Totals*	27	8,119,000	67,500	190,487	153,687	8,088,300

* The dollar losses shown in this table are preliminary estimates. They are derived from RFR's record management system and are subject to change due to delays in reporting and confirmation of actual losses from private insurance agencies (as available).

Significant Events

Fire crews minimized harm and limited fires to the place of origin in these notable February 2022 incidents:

- February 2, 2022 – Commercial fire on Twigg Place.** RFR crews responded to a working fire at the exterior of a building at a metal recycling scrap yard. The first arriving crews extinguished the fire quickly. An excavator was utilized on scene to help extinguish all of the debris involved. There were no injuries to the staff, public or RFR personnel. A Fire Investigator attended the scene.
- February 20, 2022 – Residential fire on Elmbridge Way.** RFR crews responded to a fire in a home where the cause of the fire was an excessively clogged dryer vent. Crews extinguished the fire and found there was no extension past the dryer or the vent hose that went into the wall. A Fire crew remained on scene to assist with removing smoke from the second floor for the residents. A Fire Investigator attended the scene.
- February 22, 2022 – Commercial fire on No. 2 Road.** RFR crews responded to a strip mall with black smoke showing from one of the commercial units. RFR crews extinguished the fire and cleared smoke from inside of the unit. Crews found the fire had extended into a nearby heating, ventilation, and air conditioning unit. Fire crews worked diligently to extinguish that fire and the adjacent units were vented after property representatives arrived on site. There were no injuries to residents or RFR personnel. A Fire Investigator attended the scene.

- **February 23, 2022 – Technical rescue on Garden City Road.** RFR crews responded to a commercial property for a report of a trapped person. Crews found a person with their left hand pinned between two rollers of a paper-feeding machine. Crews confirmed through visual inspection that the feeding machine and the machine next to it were de-energized and locked out. After BC Emergency Health Services crews arrived on scene and confirmed that the patient was ready to be extricated, the rollers of the machine were rotated backwards to remove the patient's hand. Once freed, the patient was loaded into an awaiting ambulance with the assistance of RFR crews. The personal protective equipment of two firefighters was contaminated on scene. As a result, a full decontamination process was conducted including the assembly of replacement personal protective equipment before returning into service. The scene was turned over to RCMP and WorkSafe BC for investigation.
- **February 24, 2022 – Commercial fire on Twigg Place.** RFR crews arrived on scene to a metal scrap recycling yard with a small amount of smoke showing. This was located at a different business location to an earlier incident. Crews established command and successfully extinguished hot spots found in the scrap pile. After the fires were extinguished, crews commenced scene clean up. There were no injuries to the staff, public or RFR personnel. A Fire Investigator attended the scene.
- **February 24, 2022 – Residential fire on Granville Avenue.** RFR crews responded to a structure fire on a golf course. Fire crews were directed to an electric golf cart storage and charging shed that was fully involved in fire with flames coming through the roof. The fire had progressed to a point whereby crews proceeded to attack the fire in a defensive manner to extinguish the shed fire. Nearby residential homes were not affected. There were no injuries to the staff, public or RFR personnel. A Fire Investigator attended the scene.

Financial Impact

None.

Conclusion

Richmond Fire-Rescue continues to monitor activities to identify and create programs to respond to emerging trends. RFR staff remain ready to continue to work through and adapt to the ever-changing pandemic situation.



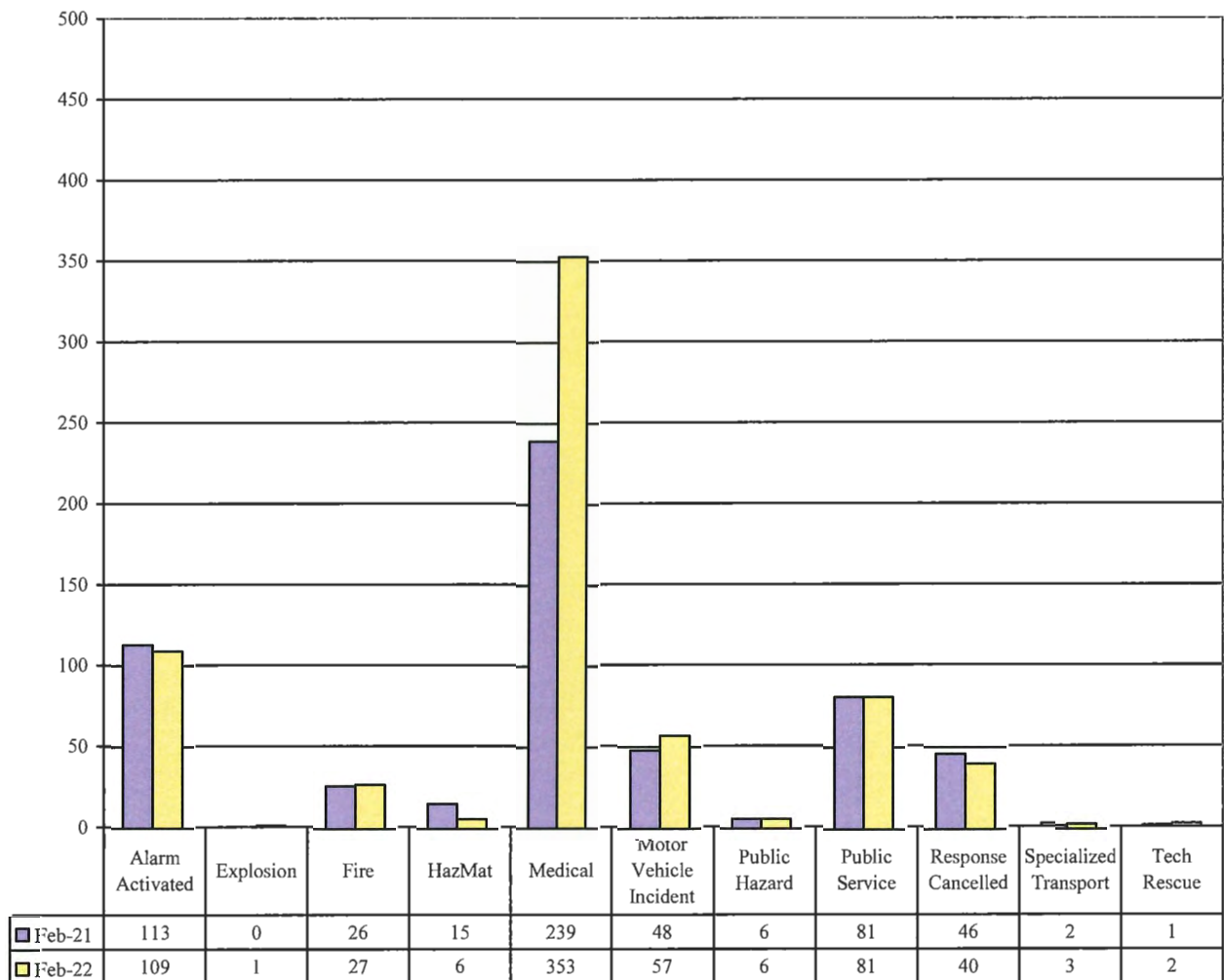
Tim Wilkinson
Fire Chief
(604-303-2701)

Att. 1: Suppression Activity, including location of February's Fire, Medical and MVIs

Incident Volumes

The following chart provides a month-to-month comparison regarding incidents occurring in February 2022 and 2021. In February 2022, there were a total of 685 incidents, compared to 577 in February 2021. This represents an increase of 19 per cent. RFR continue to see incident numbers returning to normal levels due to gradual changes in the Provincial Medical Health Officer orders in response to the pandemic.

Table 4a: February 2021 & February 2022 Incident Volumes



Incident Type Legend:

HazMat: includes fuel or vapour; spills, leaks, or containment

Medical includes: cardiac arrest, emergency response, home or industrial accidents

Public Hazard includes: aircraft emergency, bomb removal standby, object removal, or power lines down

Public Service includes: assisting public, ambulance or police, locked in/out, special events, trapped in elevator, water removal

First Responder Totals

Medical first responder incidents comprised 52 per cent of the total emergency responses for RFR during the month of February 2022. A detailed breakdown of the medical incidents for February 2021 and 2022 is set out in the following table by sub-type. There were a total of 353 medical incidents in February 2022 compared to 239 in February 2021, an increase of 48 per cent. RFR continue to see incident numbers returning to normal levels due to gradual changes in the Provincial Medical Health Officer orders in response to the pandemic.

Table 5a: February 2021 & February 2022 Medical Calls by Type

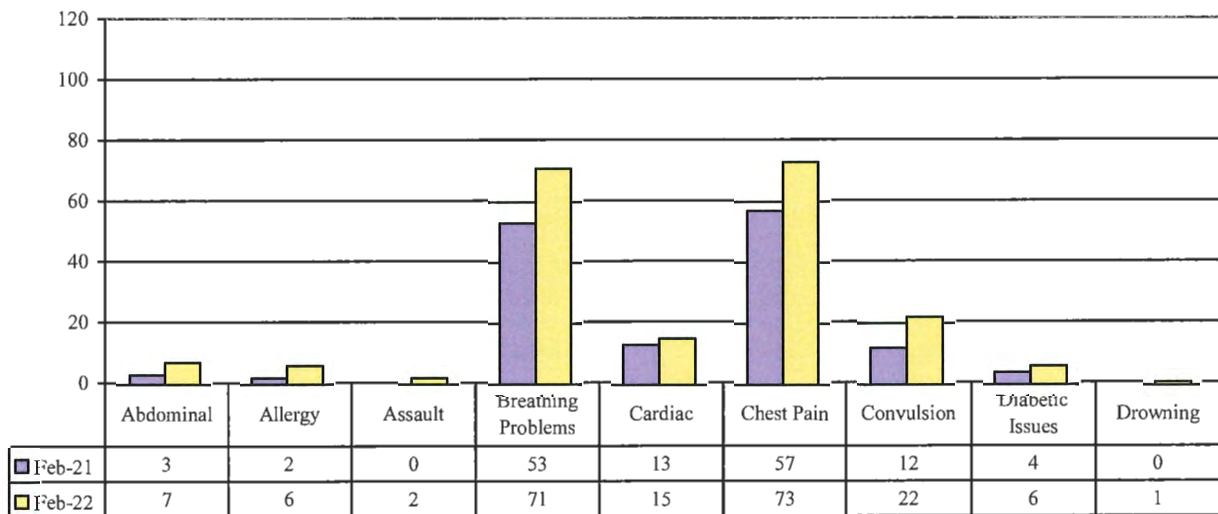
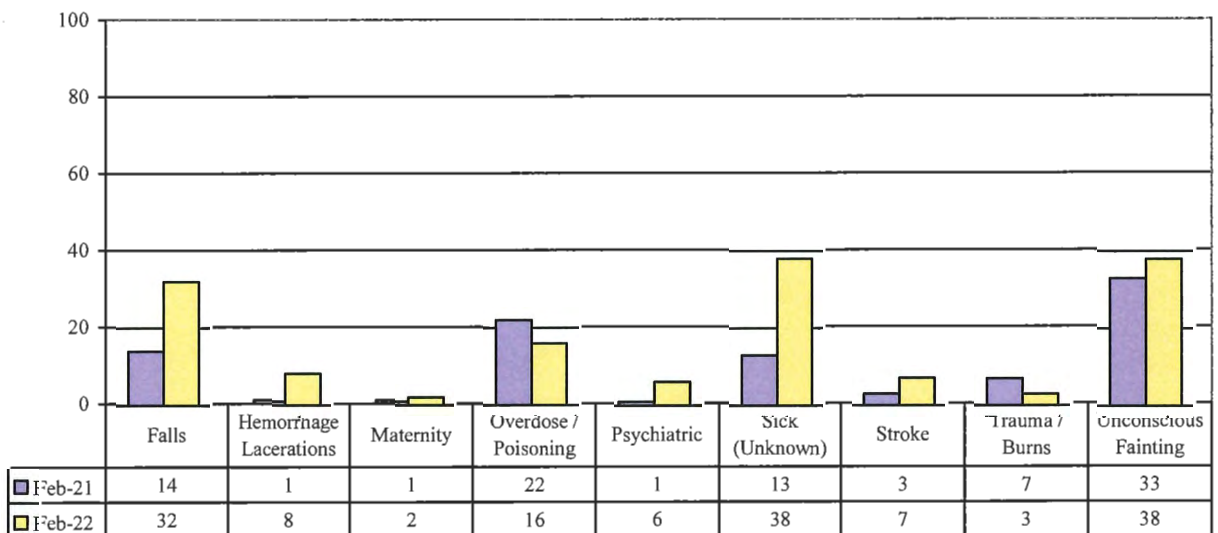


Table 5b: February 2021 & February 2022 Medical Calls by Type



Fire Investigations

The fire investigation statistics for February 2022 are listed below:

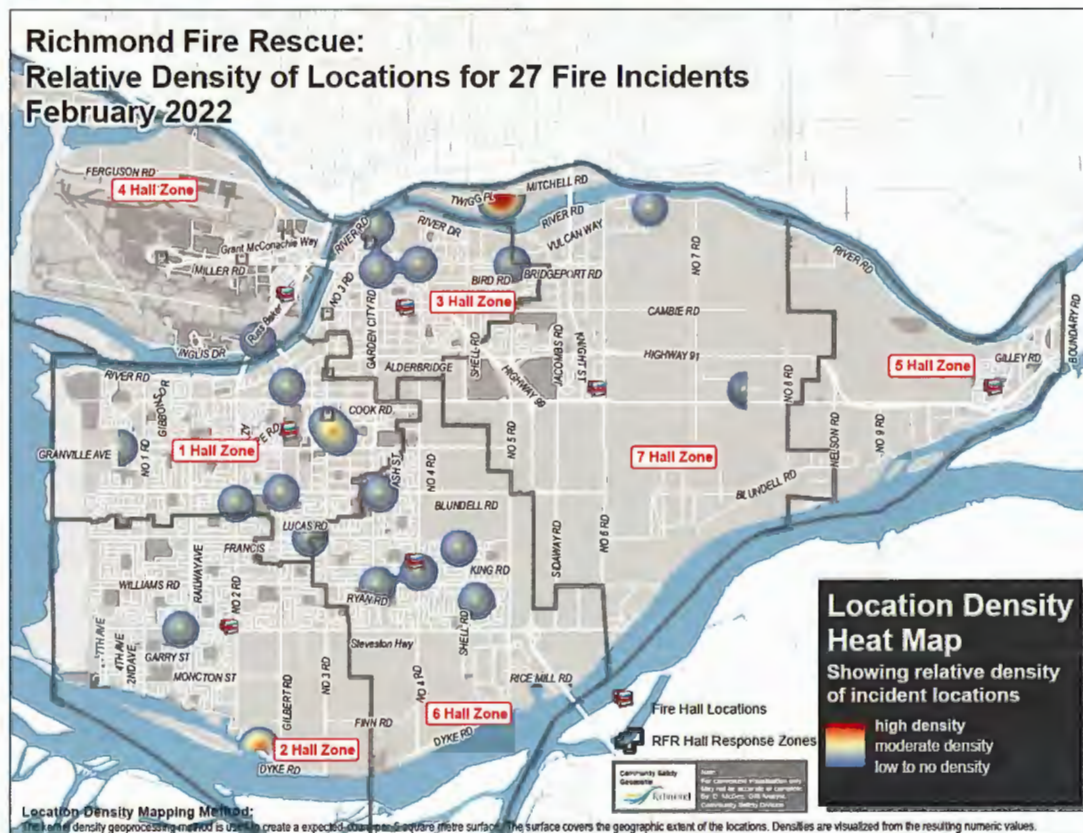
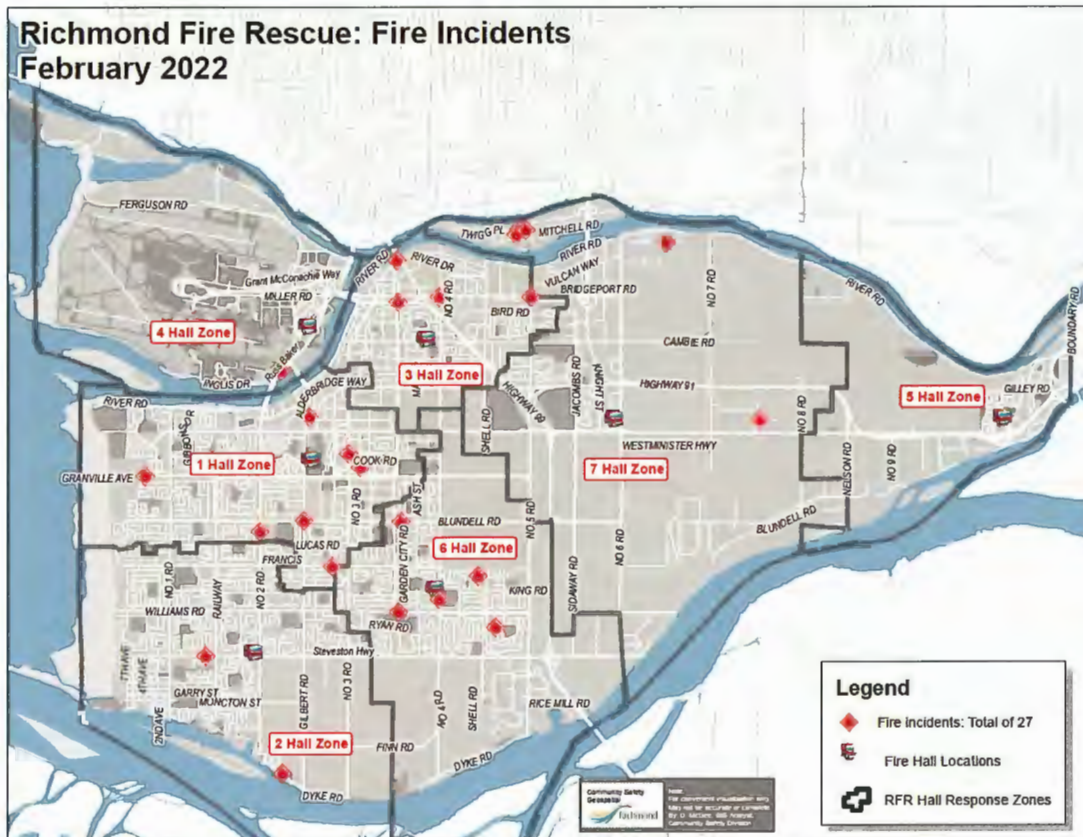
Table 6: Total Fire Investigation Statistics – February 2022			
	Suspicious	Accidental	Undetermined
Residential - Single-family	-	1	1
Residential - Multi-family	-	4	1
Commercial/Industrial	-	2	1
Outdoor	4	11	3
Vehicle	-	1	-
Totals	4	19	4

Richmond Fire-Rescue investigators report all suspicious fires to the RCMP, while working alongside RCMP staff to address potential risks to the community.

Hazardous Materials

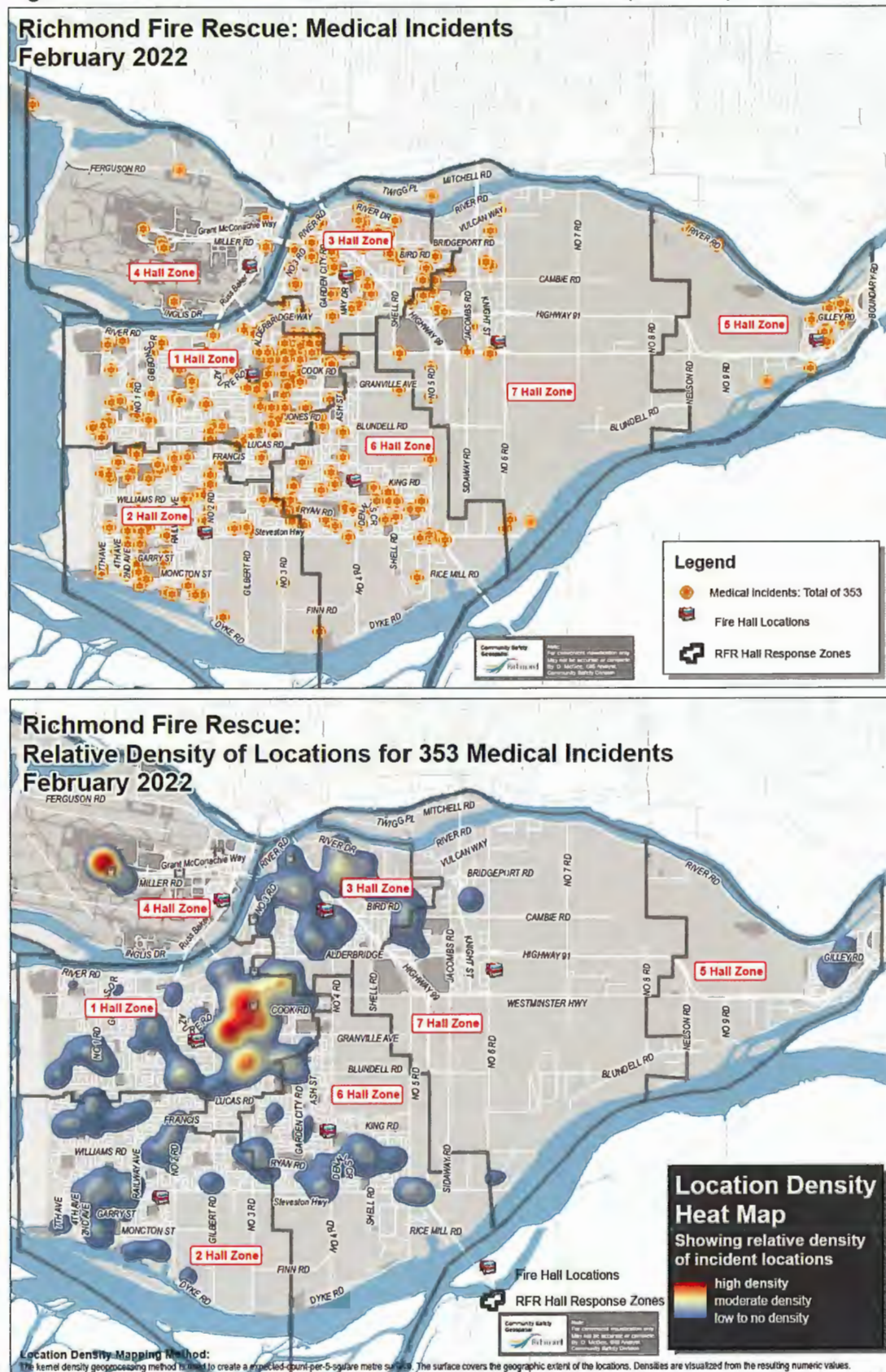
Table 7: Hazardous Materials Incidents By Type – February 2022	
	Details
Natural Gas / Vapour / Propane Leaks (small)	5
Unclassified	1
Totals	6

Figure 1: Location of reportable fires attended in February 2022 (total 27)



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Figure 2: Location of medical incidents in February 2022 (total 353)



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Figure 3: Location of MVI Incidents in February 2022 (total 57)

