

Attachment 1
Summary Heat Events
Data & Stats 2021

SUMMARY OF LAST YEARS EVENT

These three event classifications and dates are as follows:

1. Heat Dome: June 25 – 29, 2021
2. Extreme Heat Event: July 28 – August 1, 2021
3. Extreme Heat Event: August 11 – 15, 2021

When the heat dome formed over the southwest region of British Columbia, it brought five consecutive days of high 30 and low 40 degree Celsius temperatures. Of the three excessive heat events the 'Heat Dome' was the deadliest event for the region in recorded history.

Environment Canada set the thresholds of temperature, exposure timelines, and geographical location so that municipalities could prepare and respond to the needs of its citizens and workforce. For a warning or alert to be issued, the predicted highs and lows must be equal to or greater than the thresholds posted on the following graphic and must be expected for at least two or more days. Temperatures are taken once a day at 14:05 hours at Vancouver International Airport.

Data & Statistics

The significant increase in medical call responses by New Westminister Fire & Rescue Services during the days of the heat dome is included in Figure 2 for comparison to previous years during the same timeframe.

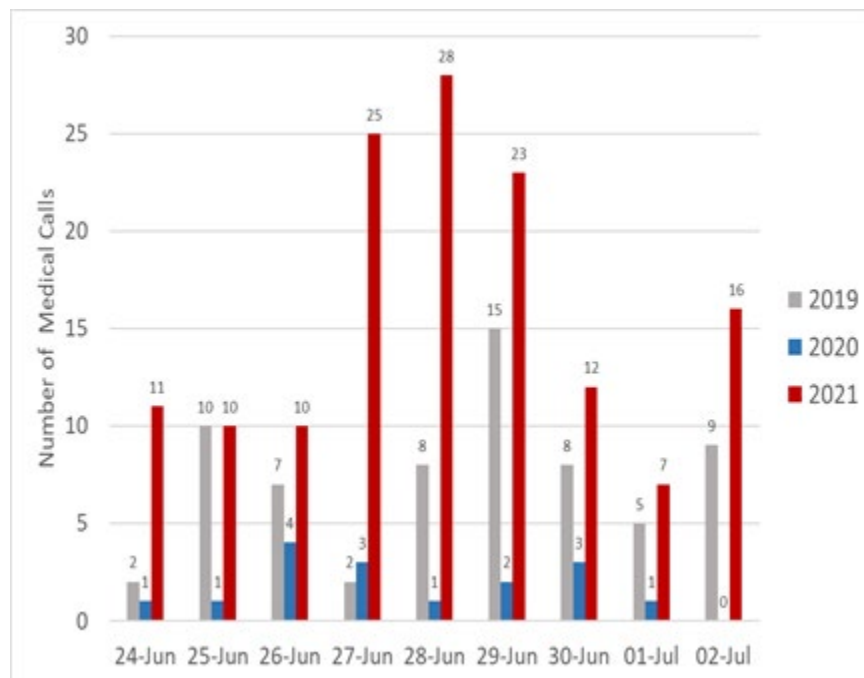


Figure 1: Number of Medical Calls NWFRS was dispatched to during the days of the heat dome compared to previous years.

The use of technology to distribute information quickly and vastly can be very effective but can only reach those who can readily access the internet. According to the BC Coroners Service (BCCS) Heat-Related Deaths-Knowledge Update, individuals 60+ years of age accounted for 91% of the heat related deaths registered during the week of the heat dome [Figure 3]. This demographic largely sources their information from more traditional channels such as television, radio, newspaper, and word of mouth.

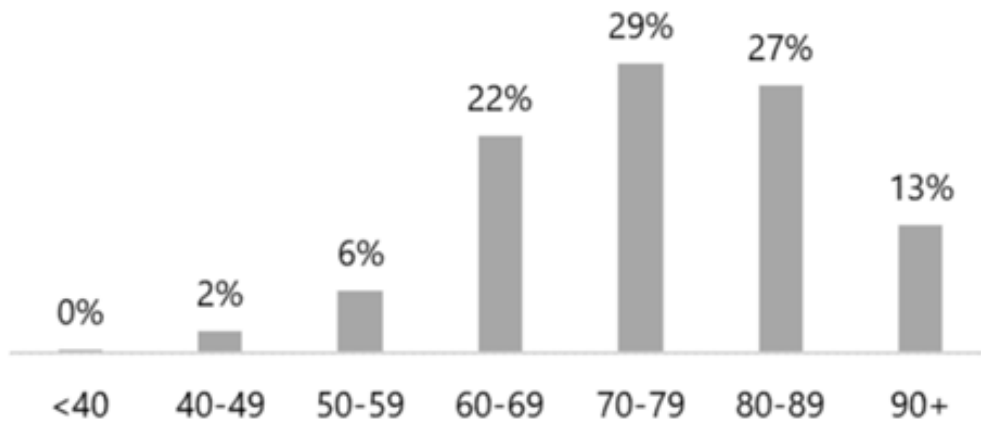


Figure 2: Heat-Related Deaths by Age Group as % of Total, Jun 25 – Jul 1, 2021.¹

The incident response data for New Westminister Fire Rescue Services during the heat dome indicated that the majority of our medical calls originated from the centre core of the City [Figure 3].



Figure 3: NWFRS Medical Call Distribution for Jun 26 – Jun 29, 2021.

Additionally, the NWFRS medical call data also indicates that 50% of the medical calls originated from a residential apartment building, with 3-4 storey low-rise apartments accounting for 30% of the calls [Figure 4].

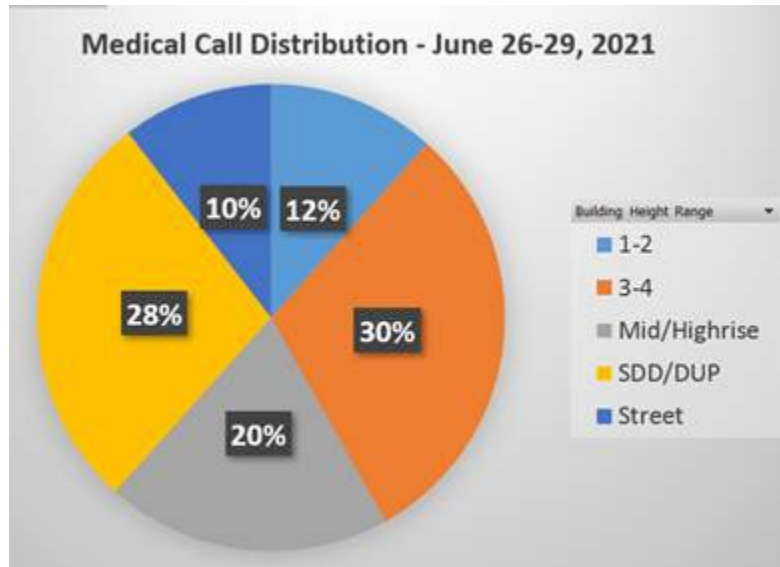


Figure 4: NWFRS Medical Call Distribution by building height for Jun 26 – Jun 29, 2021.

Summary

It is believed that the actions taken during the June 2021 heat wave saved lives. However, we also know at least 28 citizens tragically lost their lives due to inability or reluctance to access resources available to combat the extreme heat. This report and subsequent recommendations will strengthen the city's ability to reduce further loss of life in heat events.