



Overdose Cluster Analysis

Our Response to the Opioid/Fentanyl Crisis

Surrey, BC has been on the forefront of the Opioid/Fentanyl crisis in British Columbia. Overdoses, non-fatal or fatal, tend to cluster in time and space. They often cluster because drug dealers maximize sales in small geographic areas, over short periods of time, to avoid detection.

In partnership with GINQO, we developed an analytics solution to provide public health surveillance and aid faster response. We needed the ability to track multiple, clustered overdose events throughout the city so we could get in front of the problem before it worsened.

The Overdose Cluster Analysis application identifies the time, location and summary details of overdose incidents occurring within close proximity. It analyzes fire incident data, in near real-time, and identifies clusters of overdoses defined as 3 or 4+ incidents occurring within a 1 km radius over a 4 hour period. It also computes the daily rate of overdoses and searches for times that the rate doubles, at the 75th percentile, over the last 2 years' worth of experience. When either of these conditions occur, a notification is triggered to fire, health and police representatives, warning them that an overdose cluster is occurring.

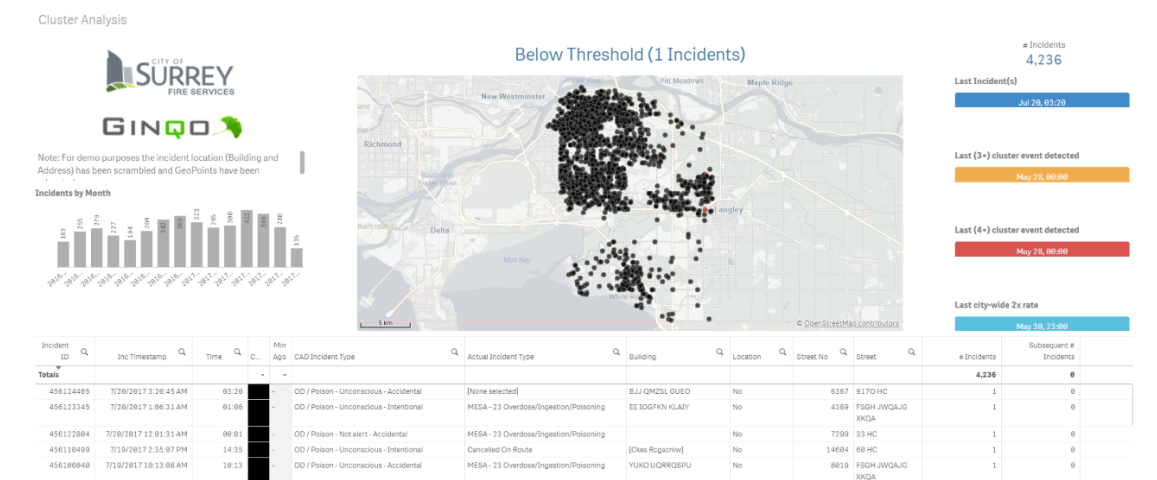
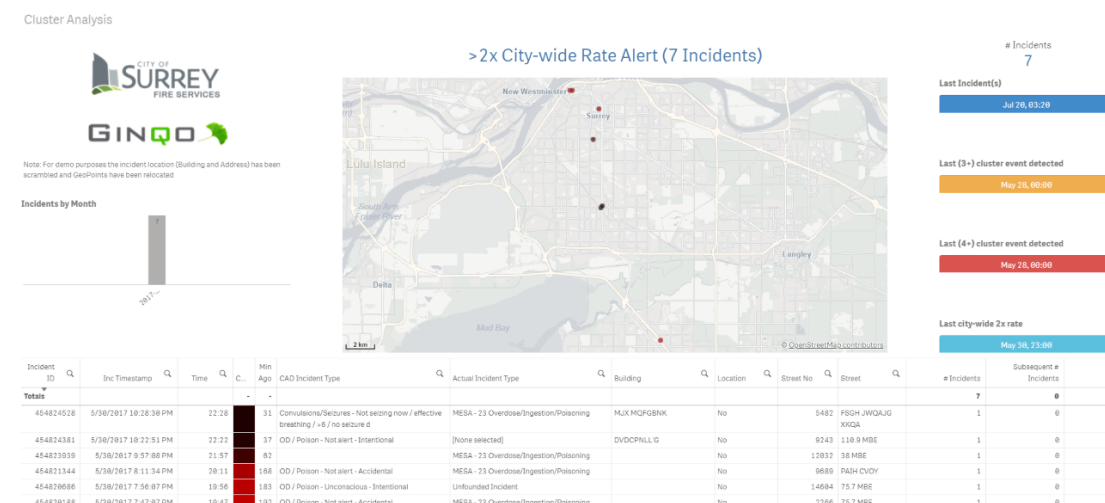
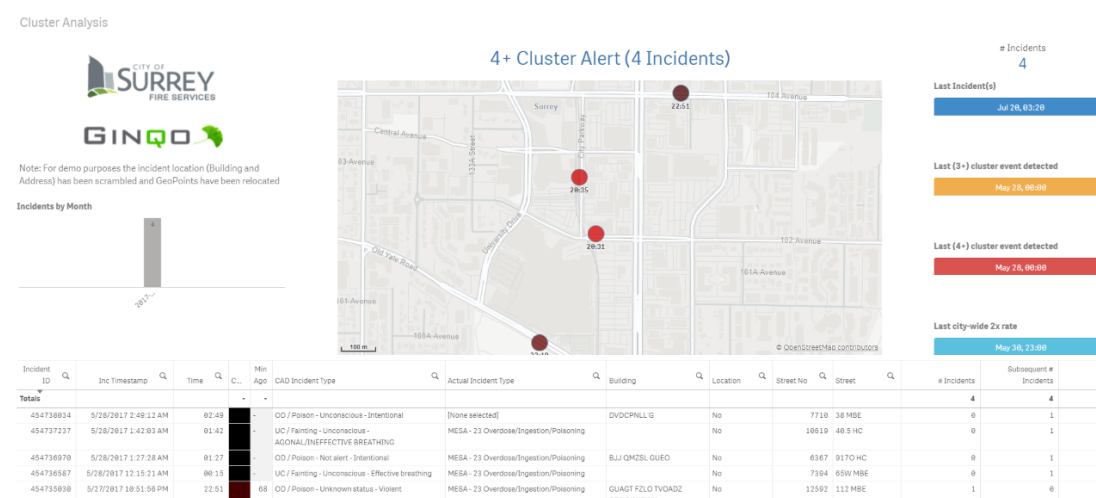
Our Overdose Cluster Analysis application provides critical information that helps us better respond to the Opioid/Fentanyl problem in our city.



Chief Larry Thomas, Surrey Fire Service

Benefits

- Provides public health surveillance and helps us deploy our first responders and public health officials faster
- Based on our live operational data, we can better control the spread of an overdose outbreak in emerging new hotspots
- An invaluable tool that enhances our existing strategies to combat the growing Opioid crisis in Surrey



"Initiatives like our Overdose Cluster Analysis application have been extremely helpful with resourcing decisions during this ongoing crisis. I recommend GINQO for their experience in public safety and for providing us excellent service!"

- Chief Larry Thomas, Surrey Fire Service