York Region COVID-19 Daily Updates & Trends

## Statistical Data Analysis Summary (Public)

Focusing on the daily new confirmed cases of COVID-19 in the York Region, this report provides a quick snapshot of the critical factors that describes the current pandemic status.

- **New Confirmed Cases:** The number of the total new cases on the reporting day
- **Current Hospitalizations:** The current hospitalizations include ICU cases
- **New Outbreaks:** The number of cases that related to new outbreaks includes School Outbreak, Institutional Outbreak, and Workplace Outbreak
- **Total Confirmed Deaths:** The accumulated deaths toll during the pandemic

On top of the daily updates, the pandemic's historical trends for the different status of the confirmed cases, by a specific year, month, or date range, is also available.

- **Status:** Deceased, Hospitalized, Hospitalized-ICU, Resolved, and Self-Isolating. Users can select/un-select anyone(s) to view the pandemic trend for the situation in concerns
- **Year:** Limits the result for the selected year(s) only
- **Month:** Drills down to the particular month(s) of the selected year(s).
- **Date Range:** Users define the start date and end date by dragging the nods on the sliding bar

The below screenshot illustrates the Daily Updates and Historical Trends of the COVID-19 pandemic within the York Region (data as of March 3rd, 2022).
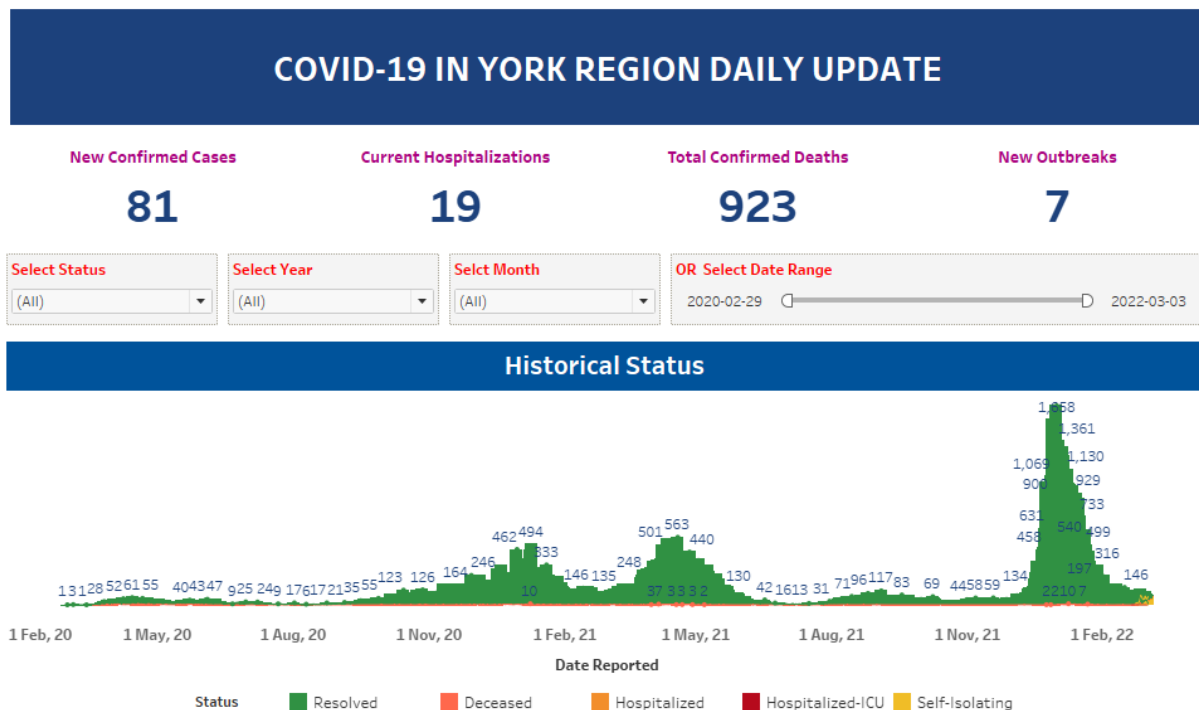
York Region COVID Cases Investigation Teams

Logistics & Staffing Analysis (Internal)

The volume of new COVID cases is grouped by the virus acquisition channels and divided into four categories in line with the structure of York Region's case investigation teams:

1. The Institutional Outbreak Team
2. The Travel Case Management Team
3. The Community Case Management Team
4. The Under Investigation & Unknown (Does not belong to a team but is necessary to be listed)

Status, Age, and Gender options are available to provide further information to support the business decisions.

The report uses two date types: Report Date vs. Estimated Onset Date. Depending on the different business strategies, the user should decide which date type to use during the reporting. For example, the screenshot below illustrates the new cases groups in March 2022.
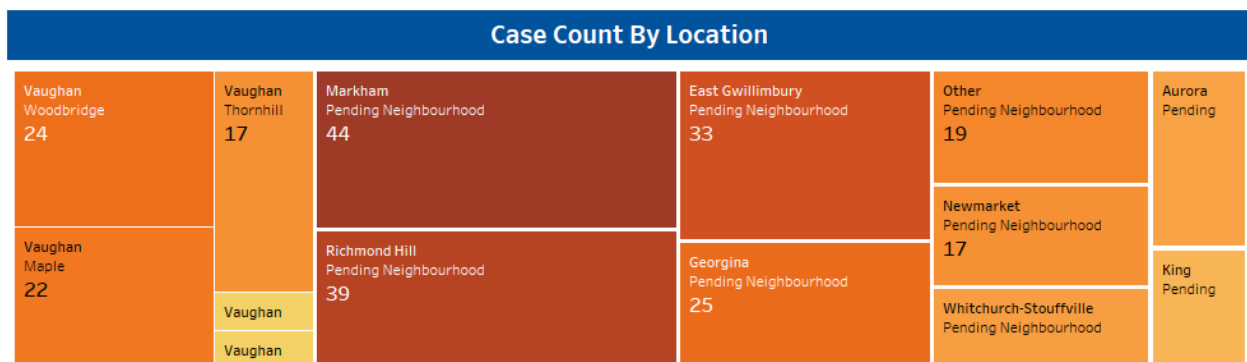

Grouping the cases by acquisitions brings an immediate understanding of the workload for each team.
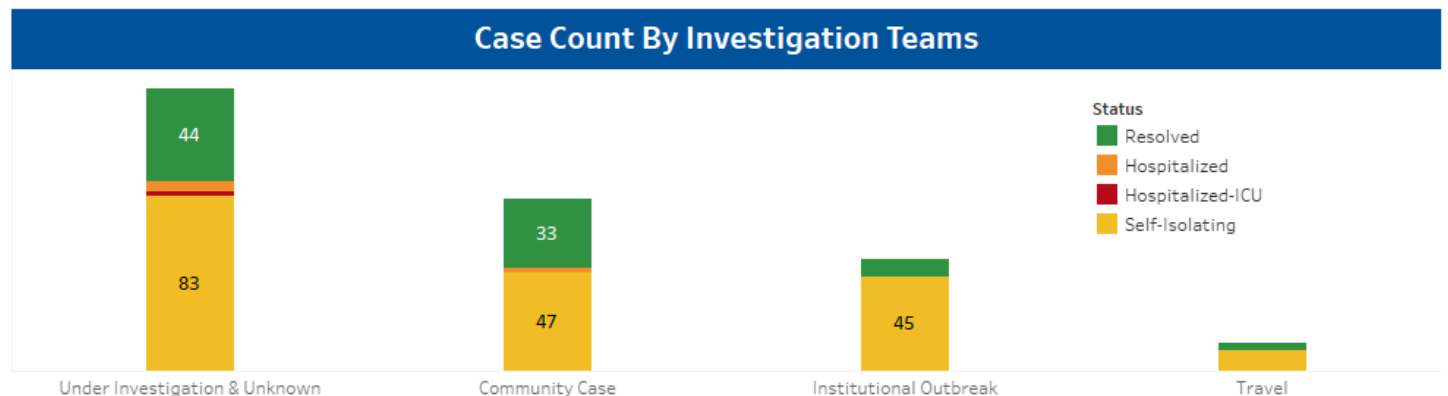
The report continues to drill the workload allocation down to the different communities of the York Region. It is another critical factor helping the logistic and staffing plan.

Technical Summary

A. The public report: COVID-19 Daily Update

The audience of the COVID-19 Daily Update report requires an easy understanding of the current pandemic status. Therefore, the report focused on accuracy and user-friendly interfacing and avoided misleading and unnecessary information.

By studying the York Region's official website, four factors were selected:

1. Number of the New Cases
2. Cases due to the New Breaks
3. Current Hospitalizations
4. Current Deaths Toll

These factors represent the current pandemic situations and match most audiences' interesting points.

The results are displayed directly with enlarged numbers, as the public audience does not have to conduct further data analysis activities. Therefore, the direct answers fit their requirement better.

| New Confirmed Cases	Current Hospitalizations	Total Confirmed Deaths	New Outbreaks
81	**19**	**923**	**7**

In addition to the daily updates, the overall pandemic trend is another interesting public requirement available for the audience. Therefore, the public should easily manipulate the report to receive the historical tendency for their selected periods. The drop-down lists for Year, Month, Date Range, and Case Status are the best solution for an audience to interact with the report.

Select Status	Select Year	Selct Month	OR Select Date Range
(All) ▼	(All) ▼	(All) ▼	2020-02-29 ○———————□ 2022-03-03

The Bar Chart combined with Line Chart is suitable to represent the trends. Instead of using the y-axis to measure the case count, the chart displayed the actual numbers. **All the purposes considered are saving the public audience's time and effort to get the results quickly and accurately.**
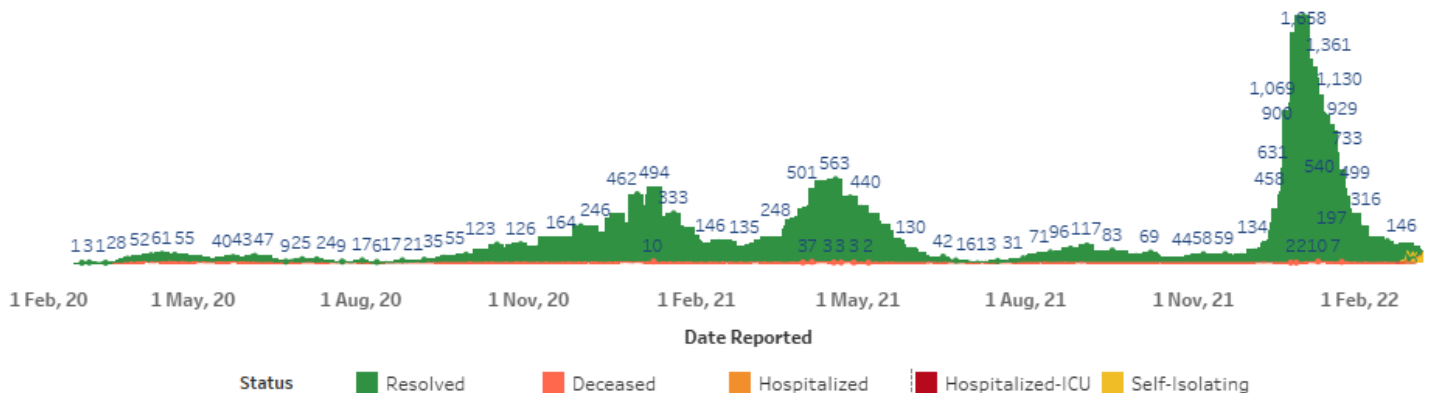
B. The internal report: Logistic and Staffing Plan

The internal COVID response management team expects York Region Logistic and Staffing Management report. This analysis aims to provide precise information that adheres to the business requirement, which is how to properly arrange resources based on the workload among different COVID response teams and locations.

Focused on the business requirement, Acquisitions is the critical variable. Therefore, it has been further grouped into four categories, and each responsible team will assign staffing based on the case count of each group (exclude the group of Under Investigation & Unknown).

The assumptions and other variables involved in this analysis:

- Date Type should be available for both Report Date & Estimated Onset Date.
  - The solution is to add a parameter to the data source and link it to the worksheet and dashboard.
- Community location is also a consideration during the staffing plan.
- Status, Age, and Gender should be considered during the logistic prioritization.
- Each team can utilize the report to review their responsible cases.

Based on the above considerations, the report designed below user interface:

Case Investigation Teams	Date Type (Report vs. Onset)	Year	Month	Date Range		
(All) ▼	Date Reported ▼	2022 ▼	March ▼	2020-02-10 ◯——————▷ 2022-03-03		

Status		Age Decade		Gender		
(All) ▼		(All) ▼		(All) ▼		

The outcome should be directly connected to and answer the essential business requirements –

1. **HOW MANY cases (either new or open) for each team?**
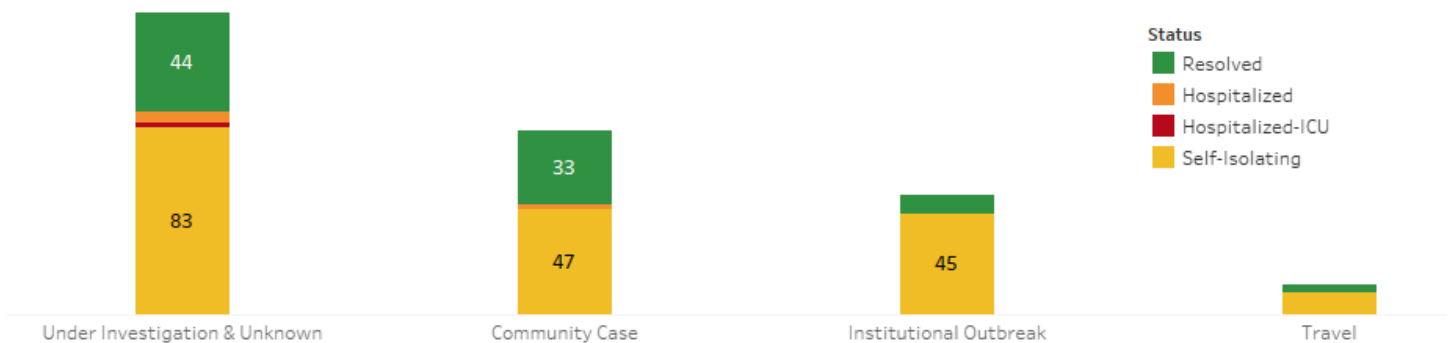
2. **WHICH COMMUNITY has the highest priority of COVID support?**

[The End]