

Protecting Ontarians through Enhanced Testing

May 29, 2020

Why Test?

Ontario's testing plan is designed to achieve three goals. To accomplish these goals, we need to make sure testing is accessible, available, timely and of high quality.



Goal 1: Increase testing to identify anyone with COVID-19 and spread in community



Goal 2: Aggressively track and trace contacts to contain spread



Goal 3: Populations surveillance: provide an ongoing evidence base to inform decision-making

Types of testing for COVID-19

Molecular (PCR)

Serology

What question does it answer?

Do I currently have COVID-19?
(current diagnosis)

Have I had COVID-19?
(retrospective exposure)

How does a sample get collected?



Nose and/or throat swab



Blood (serum) sample

What is being detected in the test?



The COVID-19 virus



An individual's antibodies

When does this test matter?

Early in the disease cycle
(Ideally day 2-4 after infection)

Late in the disease cycle
(Ideally day 14+ after infection)

Note: Both molecular (PCR) and serology testing can be performed in a laboratory (high throughput/tests per hour with slower turnaround of sample collection to result) or at point of care (low throughput, faster turnaround). There are no point of care tests for serology with Health Canada approval today.

Three Branches of Testing

- Individuals are tested in a variety of settings, including in assessment centres. New approaches are regularly being designed to make testing more accessible.
- Ontario now has the most expansive guidelines in the country, including testing asymptomatic individuals concerned they may have been exposed to the virus.
- Ontario is further reducing barriers to testing by advertising assessment centres online.

**Assessment
Centre Testing**

- Public health units remain focused on case and contact management in containing and managing an outbreak. Ontario will support these efforts with its agile and rapid response capacity, including mobile testing.

**Outbreak
Management**

**Targeted
Campaigns**

- Plans are already in place in conjunction with employers to support enhanced testing for hospital workers, first responders, retirement homes and long-term care homes.
- The province is also looking to expand testing to additional essential workplaces and is working collaboratively with sector leaders, including auto manufacturers, major retailers and other food suppliers.

System Snapshot



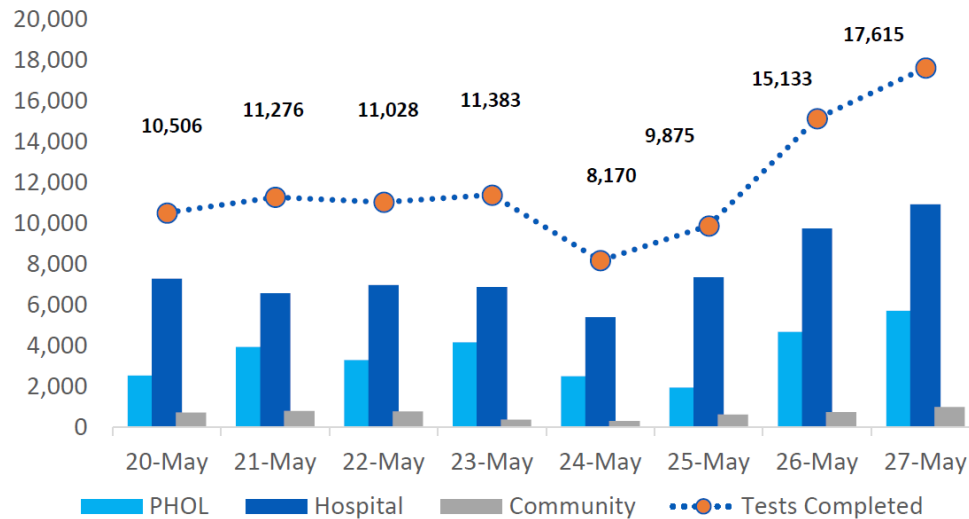
Accomplishments to Date

Testing for COVID-19 is one part of an extensive provincial plan to protect Ontarians throughout this outbreak.

- ✔ Ontario has completed **over 660,000 tests** to date
- ✔ Ontario is **leading large provinces** in daily tests completed
- ✔ Capacity to conduct more than **20,000 tests** daily
- ✔ **131 assessment centres** providing access to testing
- ✔ **Over 20 Labs** in the network to manage increased volume
- ✔ **Evolved testing guidance** to support our response to the pandemic

Testing Volumes At A Glance

Daily Volume of Tests Processed (May 28th)



662,162 (+2.67%)

Tests Completed as of May 28th



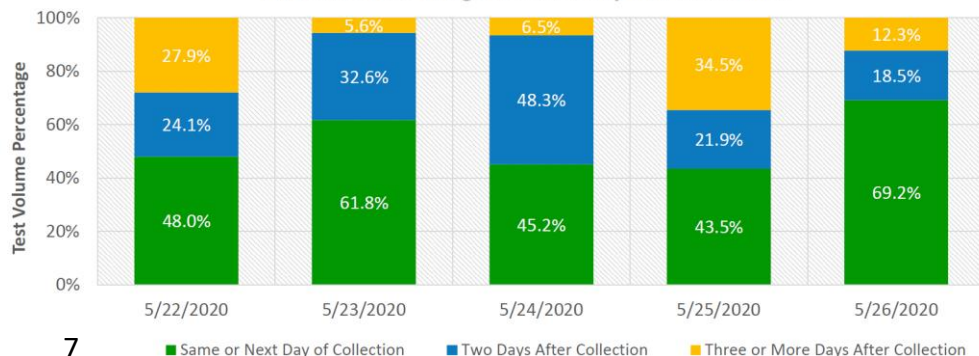
Diversified testing platform



Managing a complex logistical landscape

End to End Daily Turn Around Times (May 28th)

Test Volume Percentage Breakdown by Turnaround Time



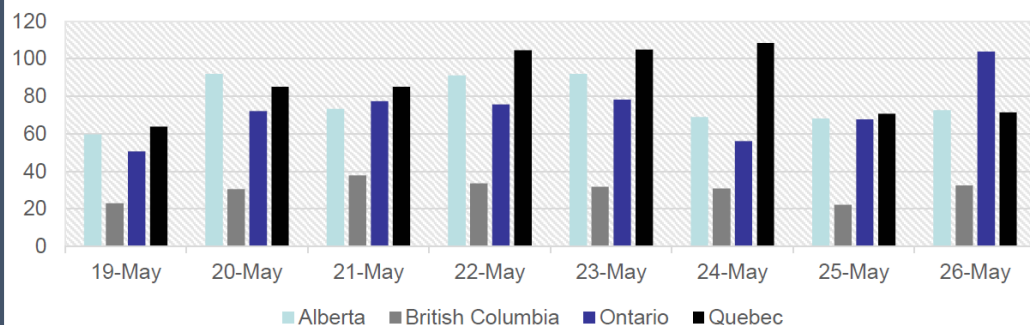
3-Day Rolling Average (May 24th to May 26th)

- **54.5%** of test results completed by the next day
- **82.0%** of test results complete within two days

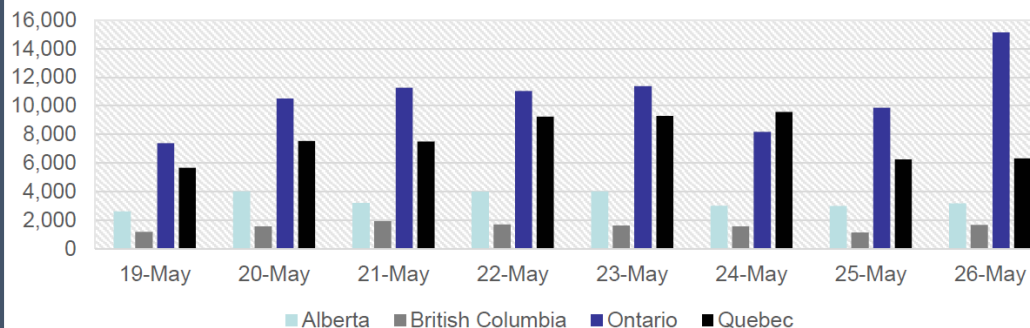
Testing Volumes at a Glance

Ontario ranks third overall for total persons tested per 100,000 population (4,280)

Daily Tests / 100,000 population - Select provinces
(by reported date)



Daily Tests - Select provinces
(by reported date)



Total Persons Tested / 100,000 Population - All Provinces
(by reported date)





Moving Forward: Ontario's Strategy to Expand Testing

Moving Forward: The Plan

Working alongside Ontario Health, Public Health Ontario, assessment centres and public health units, the province is building a comprehensive post-peak plan to enhance surveillance and testing across the province.



Identify, contain and monitor new cases and monitor spread of COVID-19



Expand testing to support public confidence and re-opening the economy



Ensure testing is accessible, available and widespread



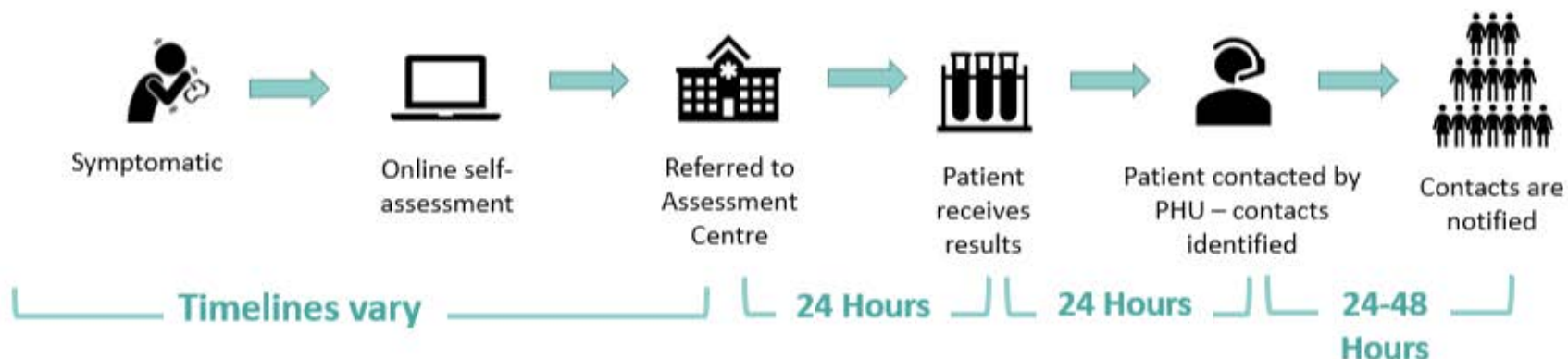
Learn from each testing phase – Plan, Do, Study, Act

Evolution of the Testing Strategy

- Ontario has **taken action** on all fronts to respond to the evolving global pandemic.
- As Ontario exits the epidemic peak and gradually reopens the province, we are shifting the focus to **enhance our testing approach** for Ontarians.
- Effective May 24, testing has been broadened to include:
 1. **Symptomatic testing:**
 - All people with at least one symptom of COVID-19, even for mild symptoms.
 2. **Asymptomatic, risk-based testing:**
 - People who are concerned that they have been exposed to COVID-19.
 - People who are at risk of exposure to COVID-19 through their employment, including essential workers (e.g., health care workers and their families, grocery store employees).

Case and Contact Management: Current Status

89.4% of new cases reached within 24 hours



No Ontarian who is symptomatic or who is concerned they have been exposed to COVID-19 will be declined a test at an assessment centre (either through appointment or walk-in, per the processes of each individual assessment centre)

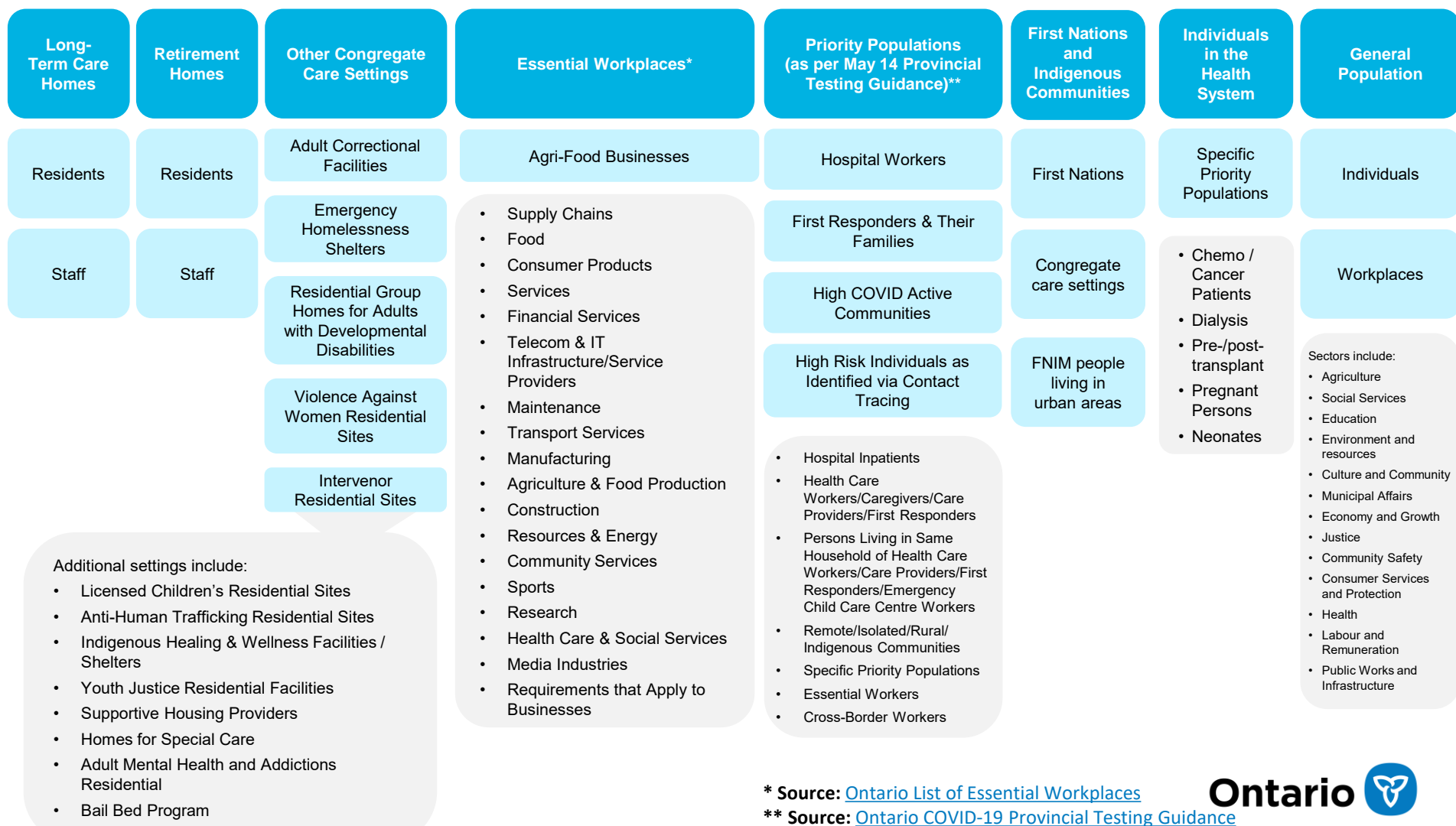
Testing Calendar: Initiated and Being Planned

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--|--|-----------|----------|--------|----------|--------|
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Ongoing symptomatic and asymptomatic testing at assessment centres | | | | | | |
| Long-Term Care Homes (monitoring and testing of all staff) | | | | | | |
| Retirement Homes (testing all residents and staff in homes with outbreaks) | | | | | | |
| LCBO (staff directed to local assessment centres) | | | | | | |
| Toronto First Responders and Families (police, fire, EMS, paramedics) | | | | | | |
| Hospital Workers at select hospitals across Ontario | | | | | | |
| Select Adult Correctional Facilities | | | | | | |
| | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ongoing symptomatic and asymptomatic testing at assessment centres | | | | | | |
| Long-Term Care Homes (monitoring and testing of all staff) | | | | | | |
| | Retirement Homes (planning and initiating testing of all staff) | | | | | |
| Hospital Workers at Select Hospitals | | | | | | |
| School Boards Communications to build awareness on testing | | | | | | |
| Community-Based Testing (High COVID Active Communities) | | | | | | |
| Select Adult Correctional Facilities | | | | | | |
| Congregate Care Settings (emergency shelters, residential group homes for adults with developmental disabilities, VAW residential sites) | | | | | | |



Landscape of Populations and Settings for Testing

All of the following populations and settings will be considered and incorporated into the testing plan, working closely with the community, businesses and stakeholders.



* Source: [Ontario List of Essential Workplaces](#)

** Source: [Ontario COVID-19 Provincial Testing Guidance](#)

Assessment Centre Testing

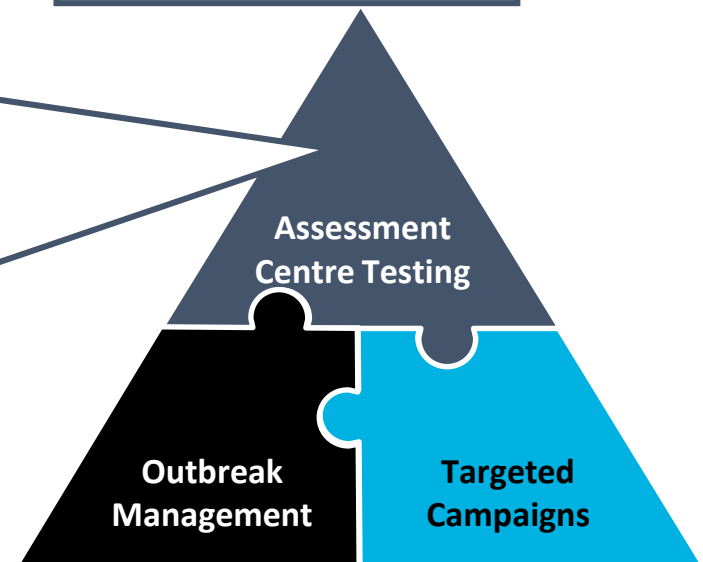
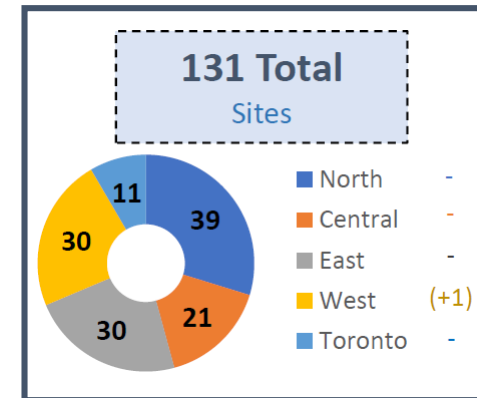
Expanding Who Gets Tested

The primary focus of testing.

- **Locations:** 131 assessment centres across Ontario

New Strategy:

- Individuals are tested in a variety of settings, including in assessment centres.
- New approaches are regularly being designed to make testing more accessible.
- Ontario now has the most expansive guidelines in the country, including asymptomatic individuals concerned they may have been exposed to the virus.
- Ontario is further reducing barriers to testing by advertising assessment centres online.



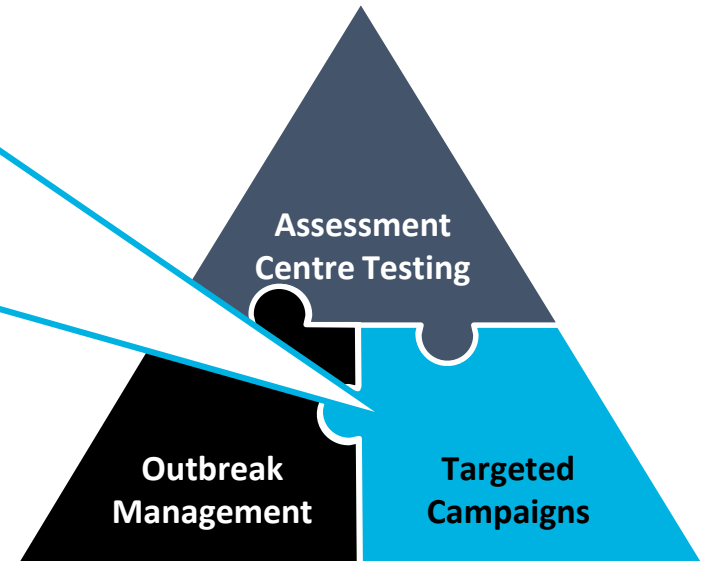
Targeted Campaigns

Detecting and Containing Cases

Proactive surveillance testing to quickly detect outbreaks and actively monitor for the spread among priority populations.

New Strategy:

- Supporting testing for individuals and communities who may be at higher risk.
- Plans are already in place in conjunction with employers to support enhanced testing for hospital workers, first responders, retirement homes and long-term care homes.
- The province is also looking to expand testing to additional essential workplaces and is working collaboratively with sector leaders, including auto manufacturers, major retailers and other food suppliers.
- Further proactive surveillance testing will also be conducted in rural, remote and Indigenous communities.



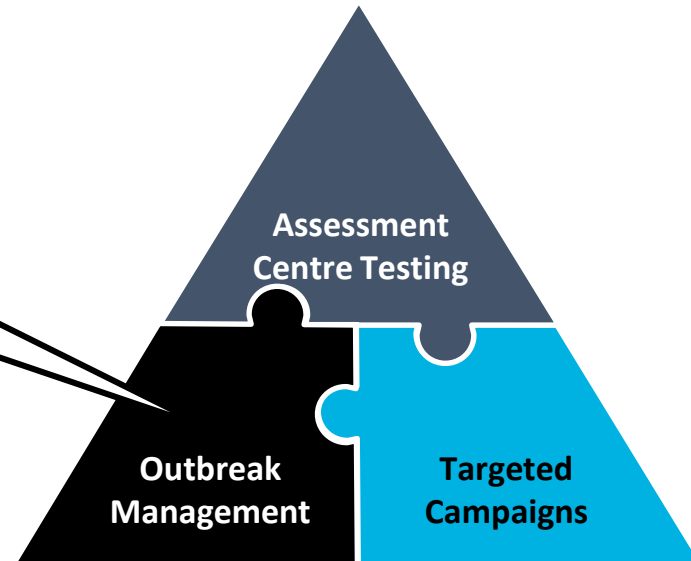
Outbreak Management

Focusing Testing to Ensure Rapid Response

Testing conducted in response to the declaration of an outbreak in a specific neighbourhood, region or institutions such as hospitals, long-term care homes and education settings, as well as workplaces.

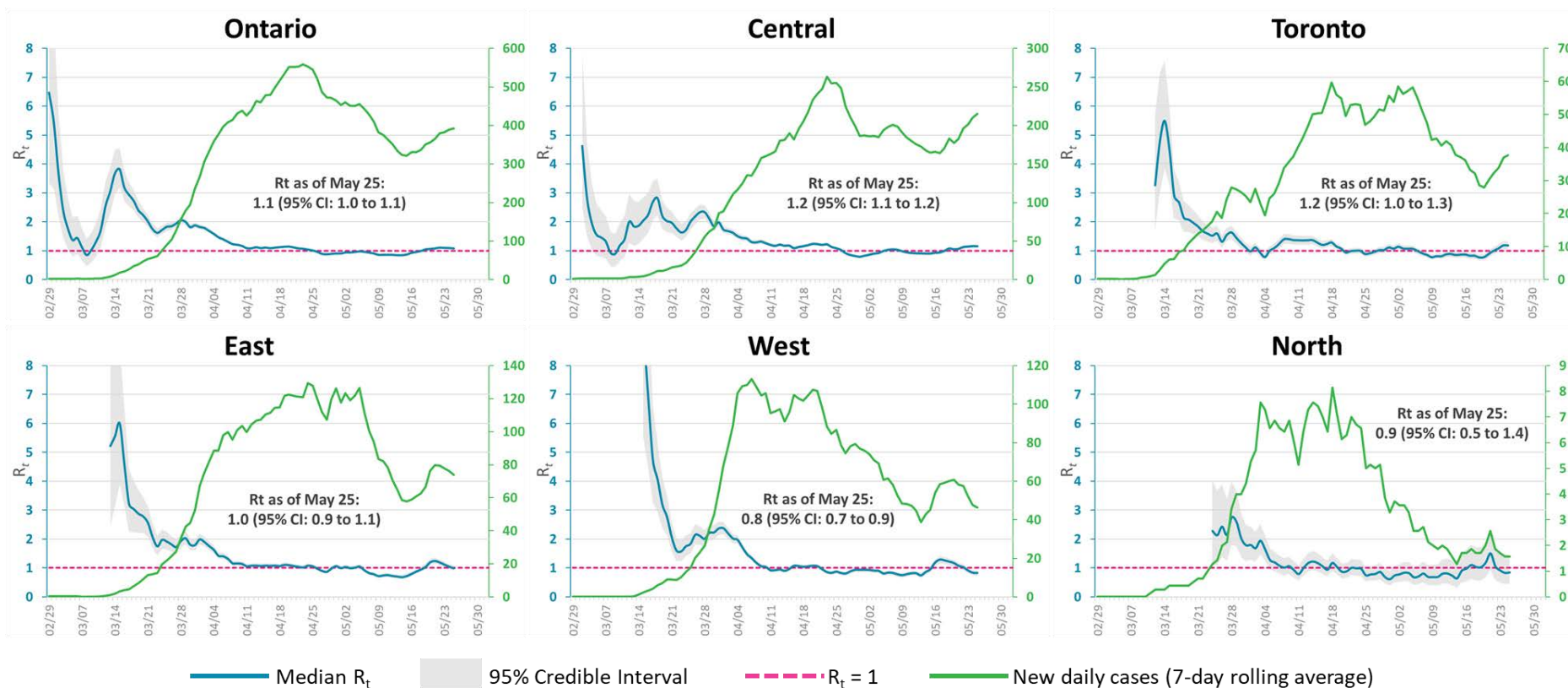
New Strategy:

- Public health units remain focused on case and contact management in containing and managing an outbreak.
- Ontario will support these efforts with agile and rapid response capacity, including mobile testing.



COVID-19 Transmission Reproductive (R_t)

The average number of new infections that results from each infection. This measures how quickly the virus is transmitted.



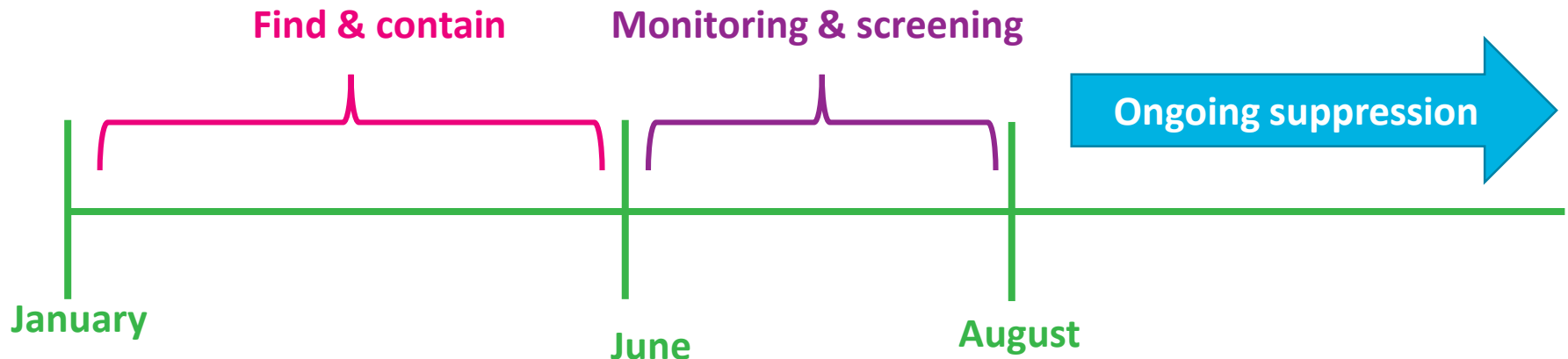
Data source: Integrated Public Health Information System (iPHIS), Coronavirus Rapid Entry System (CORES) database, as of May 27 (7pm)

R_t calculated using EpiEstim tool: Cori, Anne, et al. "A new framework and software to estimate time-varying reproduction numbers during epidemics." *American journal of epidemiology* 178.9 (2013): 1505-1512.

Three Phases to Ontario's Use of Testing

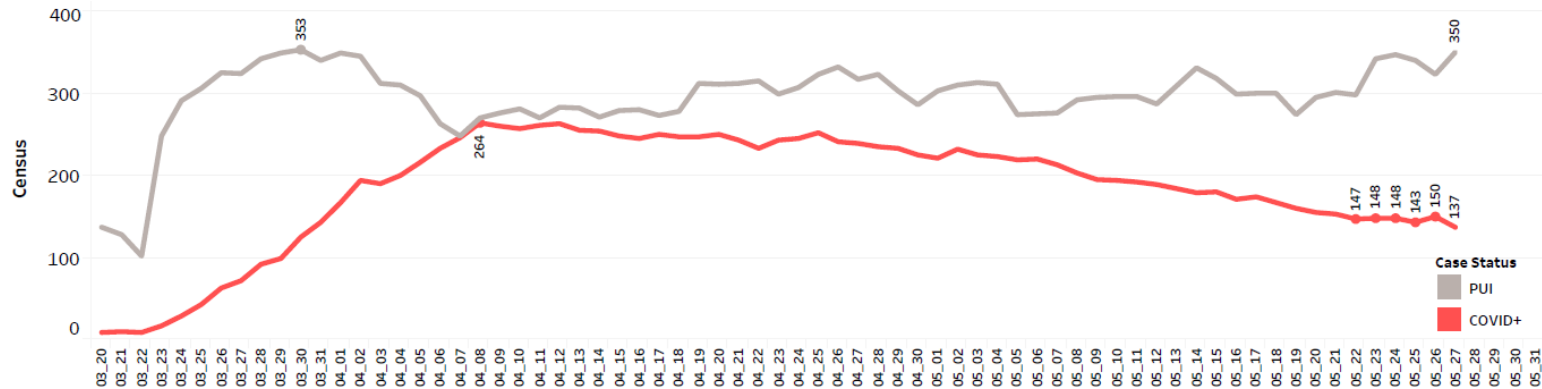
As Ontario exits the epidemic peak and begins Recovery, we are shifting the focus of our daily testing

1. **Find and contain – management of pandemic (*January to May*)**
2. **Monitoring and screening - post-peak (*June & July*)**
3. **Ongoing suppression (*August – onwards*)**



Hospital Capacity Report

Daily Trend of Critical Care COVID+ and PUI Census (May 27th)



Critical Care Bed Occupancy Rate for Baseline Capacity and Expanded ICU Capacity (May 27th)

