# Inquiry into the Victorian Government's COVID-19 Contact Tracing System and Testing Regime

Victoria's contact tracing : evolving through experience

November 2020

# Public Health COVID-19 Command

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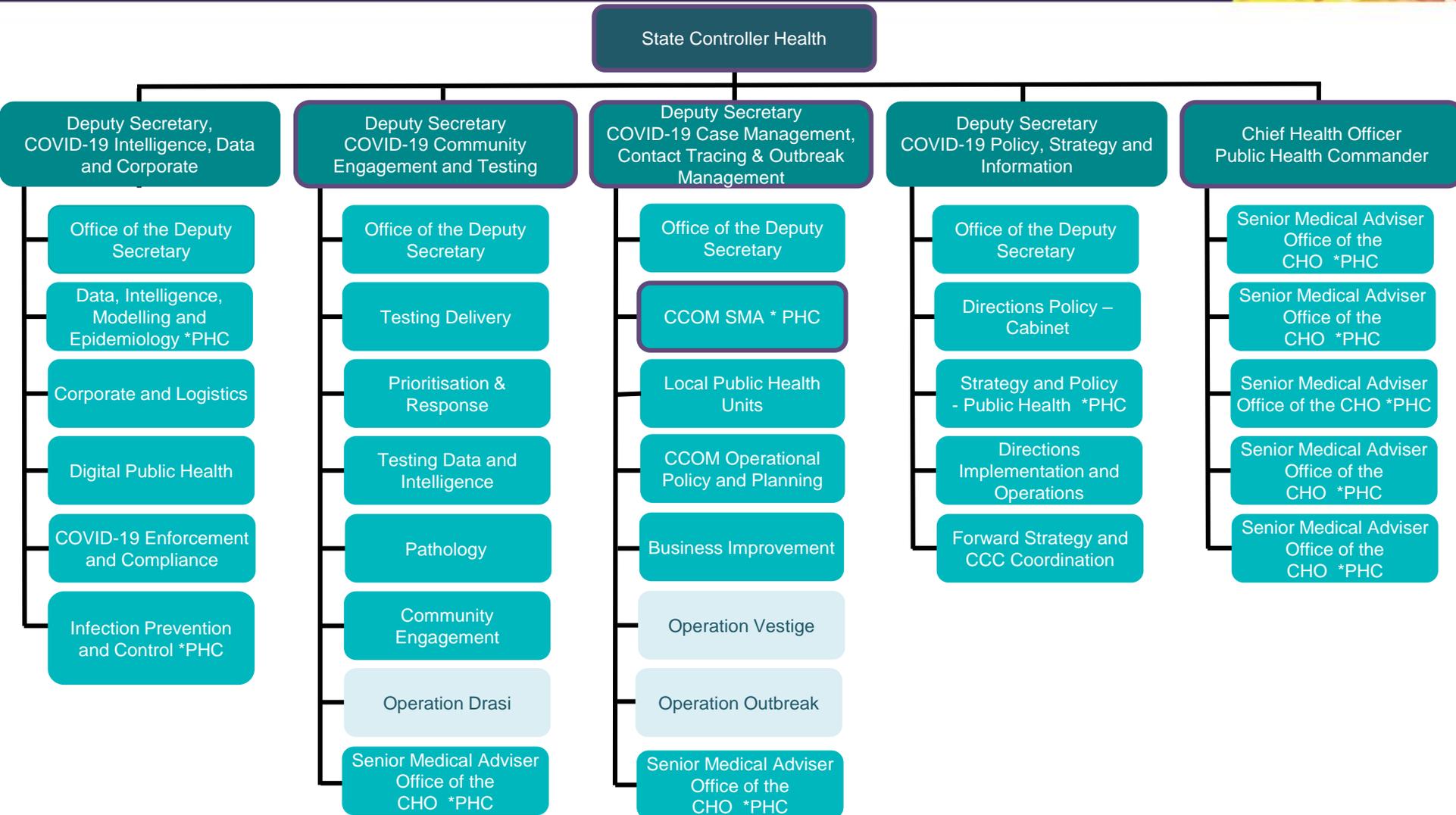
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# Public Health COVID-19: command and control

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- Corporate and Logistics
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- COVID-19 Enforcement and Compliance
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**Deputy Secretary COVID-19 Community Engagement and Testing**
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**Deputy Secretary COVID-19 Case Management, Contact Tracing & Outbreak Management**
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**Deputy Secretary COVID-19 Policy, Strategy and Information**
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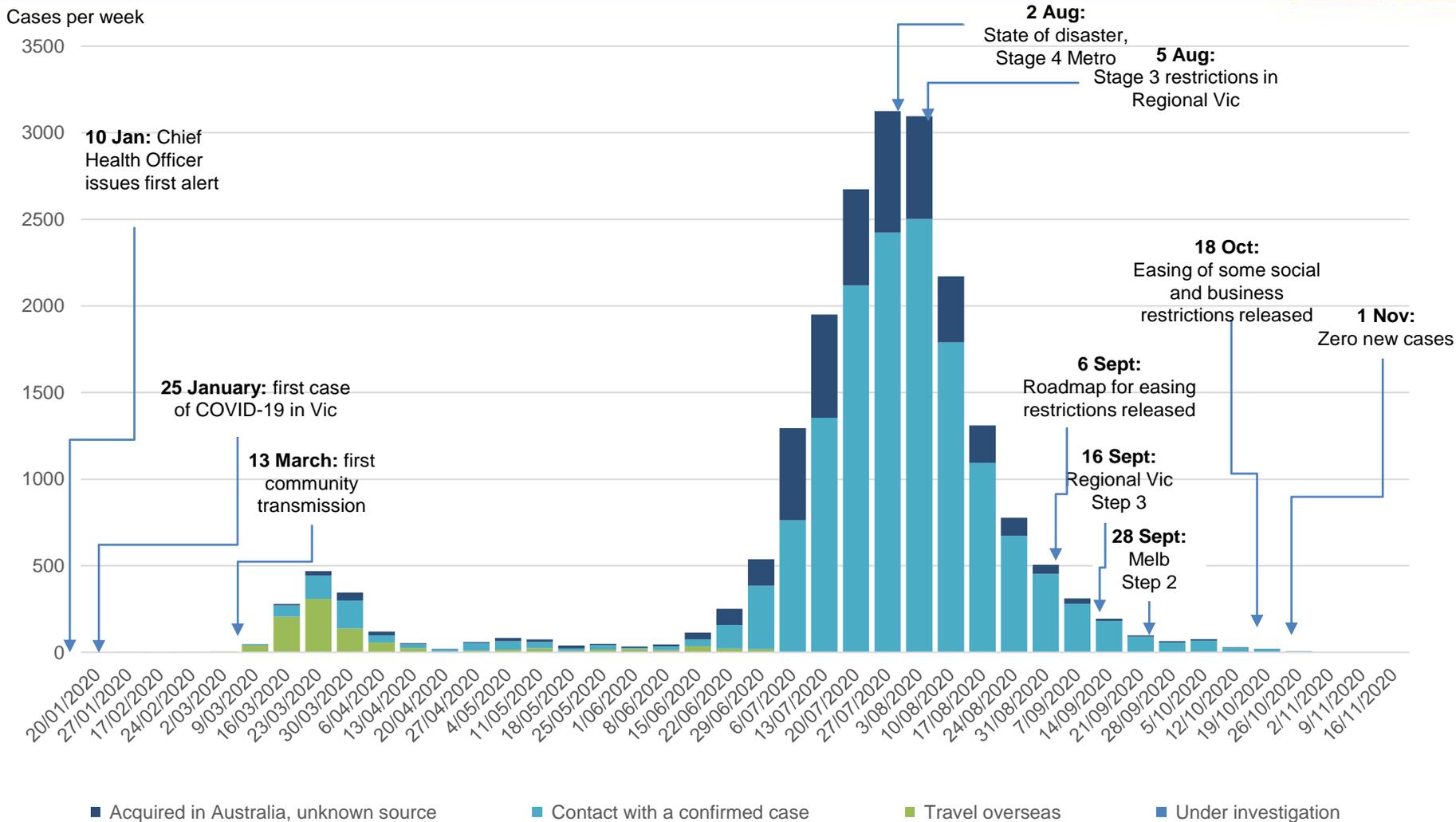# Victoria's key areas of continuous improvement

Capacity of Victoria's contact tracing system and testing regime

    I.    testing access and turnaround with results

    II.    communication of results and isolation/quarantine requirements

    III.    case and contact management

    IV.    outbreak management

    V.    integrating digital systems
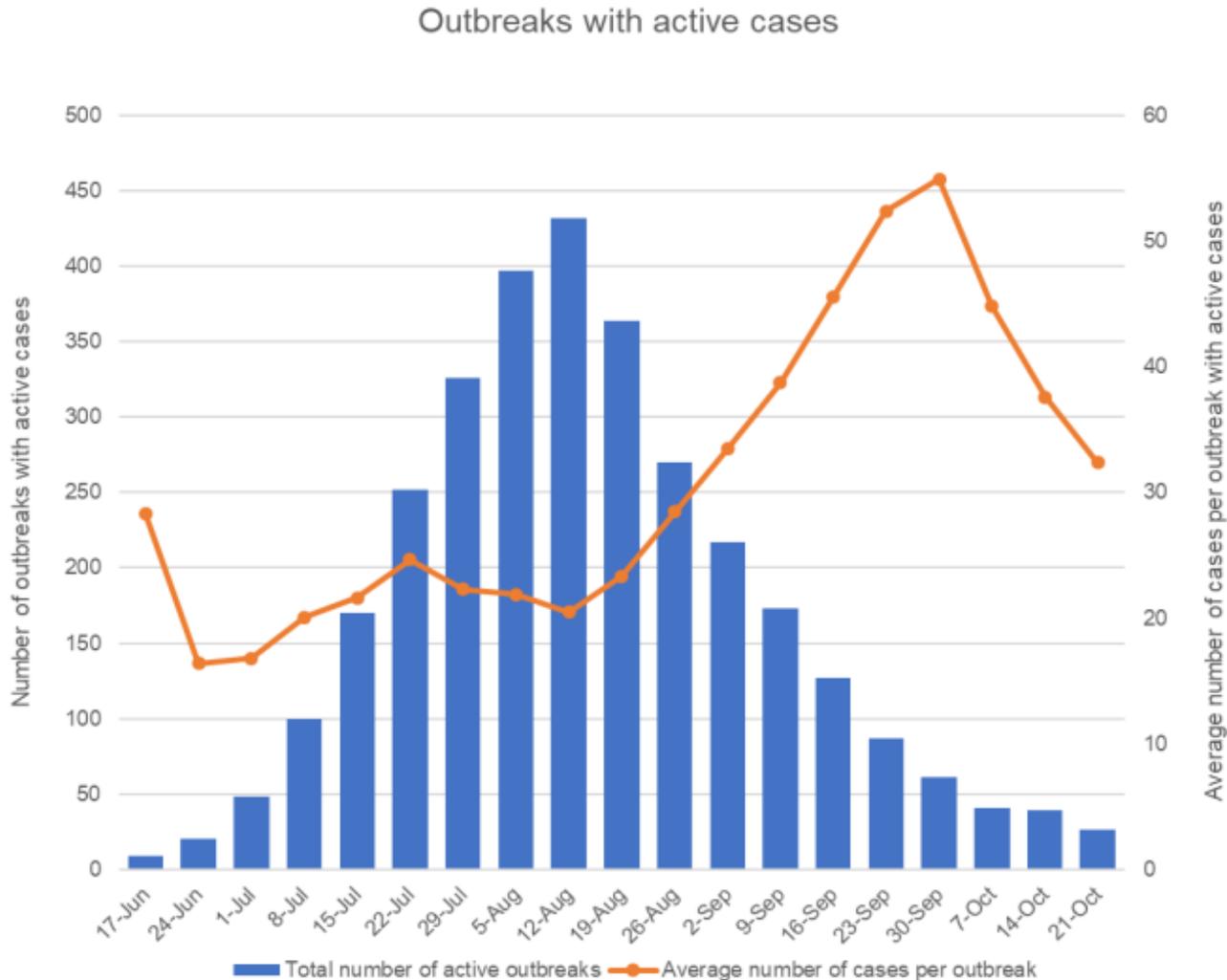
Engagement with community, businesses and multicultural groups

    I.    culturally and linguistically diverse (CALD) community engagement

    II.    engagement with businesses

    III.    strengthened relationships with GPs

# Weekly case numbers and restrictions – Victoria evolving through experience



Cases per week

**10 Jan:** Chief Health Officer issues first alert

**25 January:** first case of COVID-19 in Vic

**13 March:** first community transmission

**2 Aug:** State of disaster, Stage 4 Metro

**5 Aug:** Stage 3 restrictions in Regional Vic

**18 Oct:** Easing of some social and business restrictions released

**1 Nov:** Zero new cases

**6 Sept:** Roadmap for easing restrictions released

**16 Sept:** Regional Vic Step 3

**28 Sept:** Melb Step 2

- ■ Acquired in Australia, unknown source
- ■ Contact with a confirmed case
- ■ Travel overseas
- ■ Under investigation

# Victoria's response actively bringing down cases per outbreak



Outbreaks with active cases

Legend: Total number of active outbreaks — Average number of cases per outbreak

# Victoria as a high performing state in testing and case management

| State | Total tests | Confirmed cases | Lives lost | Population |
|-------|-------------|-----------------|------------|------------|
| NSW | 3,336,876 | 4325 | 55 | 7,544,000 |
| VIC | 3,475,749 | 20,345 | 819 | 6,359,000 |
| QLD | 1,318,805 | 1,190 | 6 | 5,071,000 |
| SA | 617,145 | 550 | 4 | 1,677,000 |
| ACT | 116,209 | 115 | 3 | 418,000 |
| NT | 66,052 | 47 | 0 | 245,000 |
| TAS | 125,049 | 228 | 13 | 515,000 |
| WA | 527,624 | 794 | 9 | 2,589,000 |

## A key input to our work is testing numbers and trends, which we monitor daily



No. of Tests & % Positive per day

Legend: Tests | % Positive | 14 day Mov. Avg. (Tests)
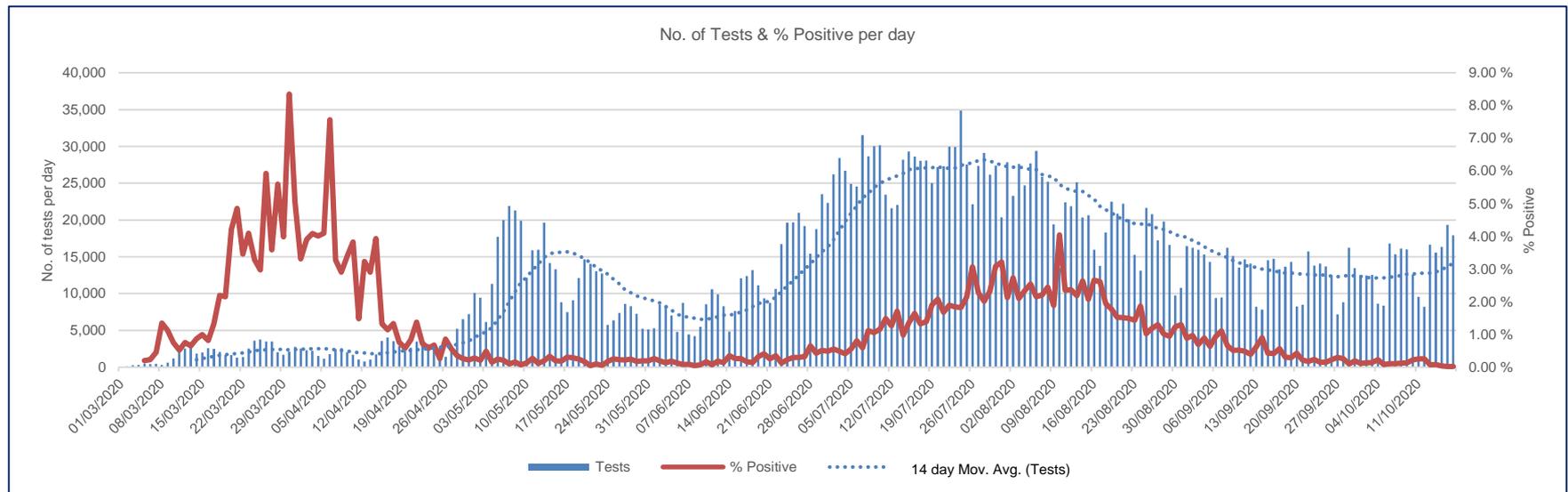
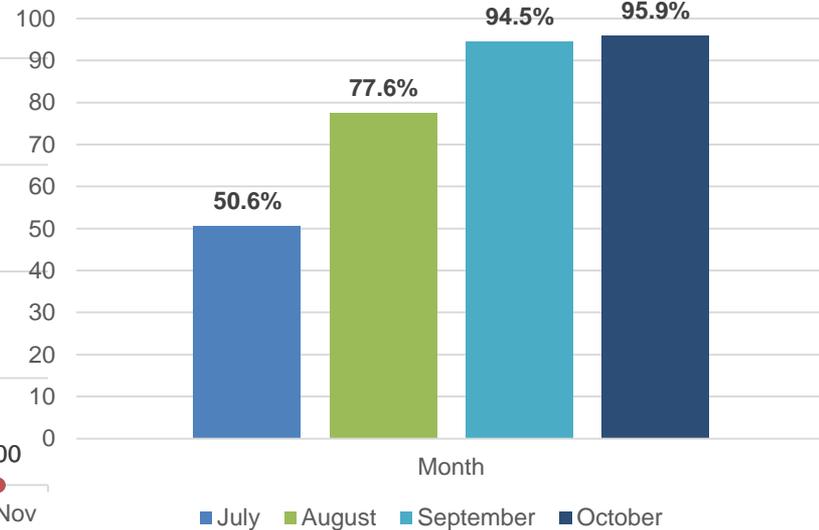| 1st wave testing response | 2nd wave testing response | Testing response – Moving forward |
|---|---|---|
| • **Avg 2,241 tests per day through initial increase in cases between 1/03 – 30/04**<br>• Mainly fixed testing network<br>• Cases mainly driven by returning overseas travellers<br>• Minimal community transmission | • **Avg 23,720 tests per day between 1/07 – 31/08**<br>• Diverse testing network incl. launch of Call to Test, Rapid Response teams, targeted testing approach<br>• Significant Community Transmission | • Testing increasingly deployed through Targeting and Rapid Response, including High Risk Industry Surveillance and Priority Communities<br>• Novel pathology modalities trialed including Saliva, and testing through wastewater surveillance |
| • **Avg 11,861 tests per day between 1/05 – 30/06**<br>• Testing network increases as testing capacity surges<br>• Some community transmission | • **Avg 12,984 tests per day between 1/09 – 30/09**<br>• Testing numbers start to fall as cases drop and community fatigue assumed to be setting in<br>• **Avg 13,799 tests per day between 1/10 – 17/10**<br>• Testing rates begin to recover as outbreak targeted testing begins | • Move to COVIDNormal Testing System including ongoing testing surveillance of High-Risk Communities, Places (eg targeted regional holiday destinations), Employers<br>• Integration of Operation DRASI into DHHS BAU |

# Victoria's high testing performance

Time from Testing to Notification to Positive Case (completion of Case Interview)

Time from Testing of Positive Case to Notification to Close Contacts (sending of SMS)

**in hours:minutes**

58:15
42:54
42:15
38:44
38:35
36:31
37:35
36:35

38:00
27:44
27:05
29:19
28:37
27:07
26:24
25:26

No new cases

0:00

4-Sep  18-Sep  25-Sep  2-Oct  9-Oct  16-Oct  22-Oct  29-Oct  5-Nov  12-Nov  19-Nov
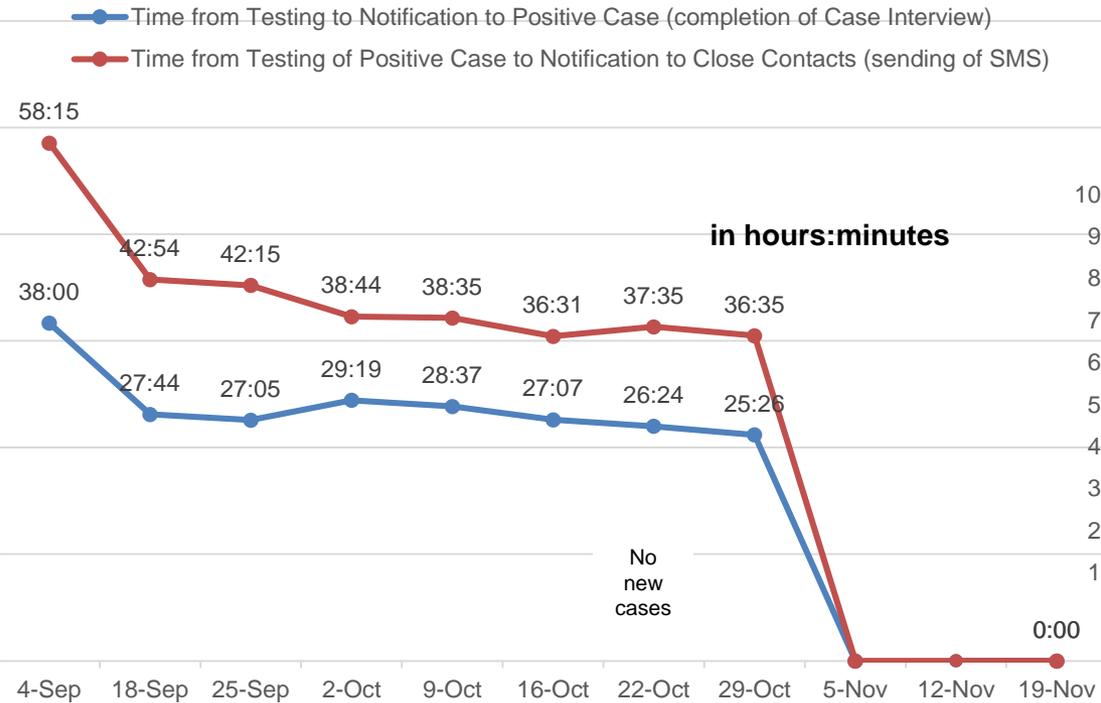
## Proportion of tests turned around within one day

50.6%
77.6%
94.5%
95.9%

100
90
80
70
60
50
40
30
20
10
0

Month

■ July   ■ August   ■ September   ■ October

# A widely accessible and effective testing system

**The foundation of Testing in Victoria is CET's Fixed Testing System – including familiar retail drive-throughs, at hospitals, and community health testing**

DHHS has a network of circa 200 fixed COVID-19 testing facilities across Victoria, made up of testing models including Health Service Led, Community Health Service Led, Metropolitan Drive Through Retail and GP Led Respiratory Clinics.

The Fixed Testing System focuses on effective community engagement, for broad and accessible symptomatic and asymptomatic testing for all Victorians, ensuring optimisation and utilisation for sustainable testing that enables and supports the reduction in COVID transmission. It takes into account:

- Scalability - Provides a scalable service capable of flexing up and down as demand changes
- The end to end customer experience to ensure the cycle of improvement is at the forefront of all decision making
- Commercial construct – Operates within a commercial and contractual construct that provides certainty in cost and service delivery
- Potential to be an early adopter - Has potential to rapidly adopt new techniques and testing practices
- Compliments low volume channels – Ensures testing initiatives can provide access to broader sections of the community otherwise excluded

As the COVID-19 response continues to evolve, the Fixed Testing System will continue to collaborate and partner with a broad range of internal and external stakeholders to ensure alignment of community testing requirements that are delivered in the most optimum manner.

This will include connection and alignment with community engagement, outbreak management, surveillance testing, pathology response times, new product offerings and emerging test modalities.

# A tailored approach to Community Engagement and Testing

**Three tiers of COVID-19 infection require different levels of engagement and testing, and a fast and flexible pathology diagnosis systems, leading to a matrix Strategy for community engagement and testing and pathology**

| | Why? | Engagement Approach | Testing Strategy |
|---|---|---|---|
| **Swift response to outbreaks** | "We tackle outbreaks quickly and ensure we test every associated contact" | · Engagement tailored for outbreak cohorts<br>· Emergency management method to deal with large, complex outbreaks – whole of community needs and issues | · Swift, broad testing responses to new cases<br>· Mobile testing of close contacts<br>· Testing cordon informed by risk profile<br>· Asymptomatic testing of casual contacts when indicated by risk profile |
| **Proactive engagement, prioritisation and risk-based surveillance testing** | "We work with high risk priority communities and industries to identify early signs of COVID-19" | · Embedded community teams (local leaders)<br>· Embedded industry teams<br>· Surveillance approach, i.e. longitudinal tracking | · Targeted proactive surveillance testing of prioritised cohorts at higher risk, eg:<br>  - mobile/critical workforces<br>  - CALD/priority communities<br>  - Major events<br>· Ongoing, proactive community and employer / industry engagement |
| **Effective engagement and accessible testing for all Victorians** | "We encourage and enable people with symptoms to get tested early" | · Engage with communities, councils<br>· Partner with regional / local health services<br>· Broad engagement with citizens | · Work collaboratively with existing private service providers<br>· Maintain, manage and scale the existing testing system<br>· Supplement with targeted approach (symptomatic LGA-based testing) |

# Victoria's contact system and testing regime makes necessary adaptations in response to the evolving pandemic

## July

*Vestige*

Launch of regional LPHUs

PHESS improvements

Electronic lab reporting

Case and Contact Management Portal

## early September

Launch of Salesforce end-to-end case management platform

Team 3 outbreaks CALD

## October

Operation outbreak

Secondary contacts

Day 11 testing

## March - June

Launch of Whispir automated SMS notification

Surge workforce to enhance contact tracing capability

Outbreak squads

## August

Creation of sector-based outbreak management teams

Formalise KPIs across CCOM

Routine interrogation of metrics performance

Rapid Response Testing Teams and Roving Testing Squads

Call-to-Test

## Late September

Launch of metro LPHUs

Exposure site publication

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# Victoria's steadily improving case and contact management

| Date From | Date to | Percent of cases contacted within 24 hours | Percent of cases interviewed within 24 hours | Percent of known contacts notified within 48 hours |
|---|---|---|---|---|
| 15-Aug | 21-Aug | 100% | 75.44% | 99.26% |
| 22-Aug | 28-Aug | 100% | 74.81% | 98.81% |
| 29-Aug | 4-Sep | 100% | 88.49% | 99.28% |
| 5-Sep | 11-Sep | 100% | 95.36% | 98.22% |
| 12-Sep | 18-Sep | 100% | 98.82% | 99.46% |
| 19-Sep | 25-Sep | 100% | 100% | 99.05% |
| 26-Sep | 2-Oct | 100% | 98.65% | 99.40% |
| 3-Oct | 9-Oct | 100% | 100% | 99.65% |
| 10-Oct | 16-Oct | 100% | 100% | 100% |
| 17-Oct | 23-Oct | 100% | 100% | 99.44% |
| 24-Oct | 30-Oct | 100% | 100% | 98.87% |
| 31-Oct | 6-Nov | N/A | N/A | 100% |
| 7-Nov | 13-Nov | N/A | N/A | N/A |

**Cases contacted and interviewed**

**Contacts notified**

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# Engaging with all sectors of the community and workplaces

## Workplaces

Partnership and cooperation with industry is essential to ensure employers are taking steps to reduce risk and stop transmission at work. Workplace obligations ensure that plans and processes are in place to manage risks and respond to outbreaks. Employees, customers and vulnerable cohorts are protected through COVIDSafe plans and compliance and enforcement by WorkSafe

## Hospitals and sensitive settings

Risk assessments, COVIDSafe Plans and common response frameworks will improve outcomes for aged care, schools, disability care, residential care and other sensitive settings

## Community engagement

Effective and sustained community engagement maximises protective COVIDSafe-behaviours and testing, and minimises misinformation

## Public health intelligence

System improvements, including timely and accurate data sharing, coordination of responses and targeted resourcing will ensure the health and human services system can respond effectively to new cases as well as providing general healthcare and social supports
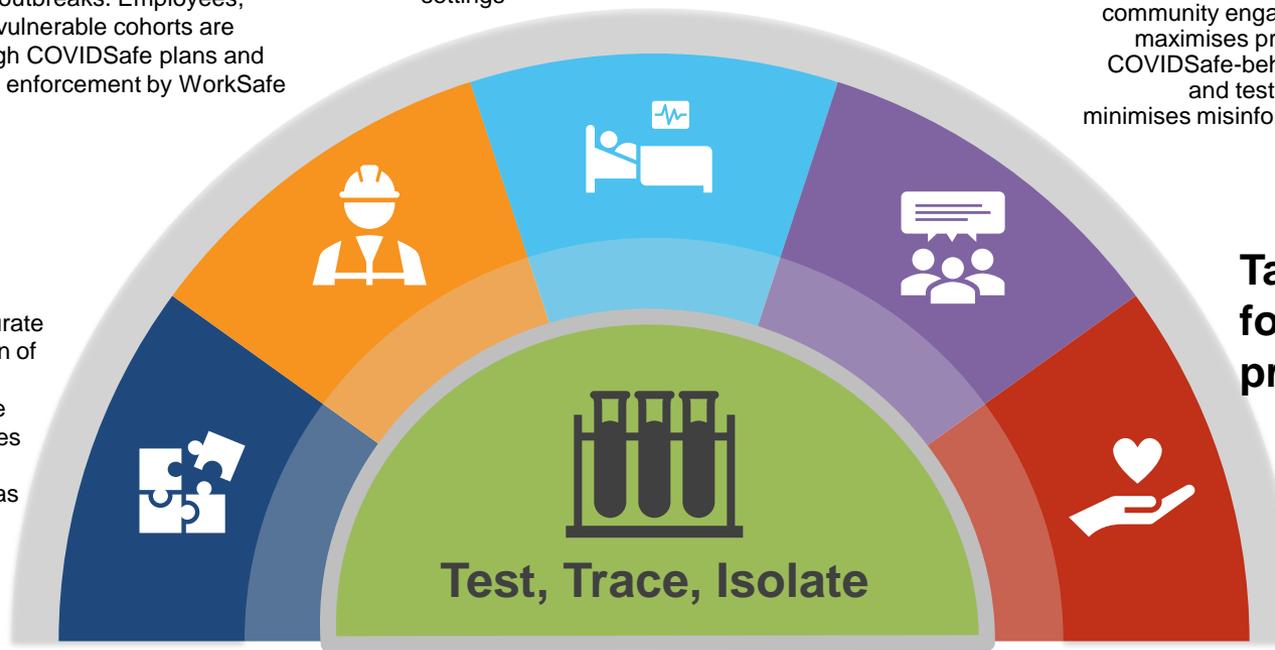
## Targeted support for priority cohorts

Risk-based interventions for CALD, Aboriginal and Torres Strait Islander peoples, and places with high transmission risk will reduce transmission among priority Victorians

**Test, Trace, Isolate**

Testing, tracing and isolating are central to an effective COVID-19 response.  Broader community, workplace and system responses are required to prevent, identify and manage outbreaks.

# Creating tailored response measures to make opportunities from challenges

Victoria's outbreak management approach has advanced significantly and rapidly in recent months to respond to the new challenges presented by the second wave. In parallel there has been a major focus on operating model systematisation and continuous improvement to address previous limitations and to build on existing strengths

| Key challenges and opportunities | Response |
| --- | --- |
| **Second wave characterised by super spreader events** – virus passing rapidly from large households and casualised, mobile workforces, and into congregate accommodation and residential service settings | Specialised **setting-specific outbreak teams and approaches** established as part of **operating model development** work |
| **Volume, variety and evolving nature of outbreak events placing strain on operating model** – particularly governance, processes, organisational structures, systems and data | Focus on **systematisation of outbreak management approach** while maintaining flexibility and agility to ensure responses are both robust and rapid |
| Opportunity to **strengthen integration and pace of collaboration across agencies**, bringing together teams involved in outbreak responses across Government | Build on multi-agency involvement in outbreak responses with **Operation Outbreak Management** – bringing greater clarity, authority and resources to the **multi-agency approach** |

# Prioritising clear, targeted and coherent communications with Victorians and workplaces



## Daily numbers

Latest numbers are published every morning to keep the public up to date.

## Exposure sites

A list of high-risk locations are published on the DHHS website, we ask that if people have visited any of those sites within 14 days of the list being published that they watch for COVID-19 symptoms.

If symptoms occur, immediate testing should occur.

## Workplaces

COVIDSafe plans for each sector

Business Victoria hotline

Surveillance testing program

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# Working with priority communities to reduce transmission

**Dedicated strategy in public housing settings:**

- To ensure residents are educated about the symptoms of COVID-19 and of how to reduce the risk of infection.

- To engender understanding and acceptance of the public health measures

- To provide easy to understand, accessible and relevant information to residents

**Establishment of a dedicated Priority Populations team (Team 3) within Case, Contact and Outbreak Management**

- Objective of Team 3 is to support culturally appropriate engagement with Aboriginal and CALD populations

**Translation of materials into 57 languages. Audio and video content created by DHHS in partnership with local communities:**

- https://youtu.be/9EP1SC1NmpU

**Deep engagement in high-risk communities (Altona North, Hallam, Frankston) in partnership with Local Government, not-for-profit community groups**

# Digitising systems to speed up and expand capacity of contact tracing

| Improvement | Benefit |
|---|---|
| **Digital testing ('Test Tracker')**<br>• Tests digitally recorded and sent directly into pathology lab systems | • Shift from paper slips to digital, reduces manual data entry & error |
| **Digital improvements to PHESS**<br>• Upgrading the software and migrating the system to the DHHS Microsoft Azure platform<br>• Application monitoring and improvements to configuration settings<br>• Implementing a separate (tactical) database for negative test results<br>• Implementing secure remote access | • Expanded capability to process higher volumes through automated workflows<br>• Enabled multiple workforces (internal and external) to use concurrently |
| **Case and Contact Management Portal**<br>• Real time PHESS integration to auto-allocate cases and contacts to internal and external (eg, surge workforce) contact tracing teams<br>• Hi-security to ensure data collected is managed in accordance with laws and DHHS privacy policies | • Auto-allocated cases and contacts – quicker interview times and lower margin of error<br>• Improved data quality by removing manual entry |
| **Digital notifications**<br>• SMS messages using Whispir and automatic importation into PHESS | • Enabled rapid, consistent and coordinated messaging to cases and contacts |
| **CRM**<br>• To integrate existing improvements and streamline systems for even quicker responses | • Ability to scale up existing improvements and streamline central teams with LPHUs |

# Outbreak squads: providing rapid response and prevention

**Infection Prevention and Control Outreach Nurses** (IPCON):

a specialist rapid response team expert in preventing the spread of infectious diseases to enhance COVID safety.

**Outbreak response visits**

- support outbreak sites to ensure effective containment of public health risks.
- dedicated focus to ensure testing and deep cleaning
- support rapid contact tracing by engaging onsite to identify impacted staff or other personnel.
- inform outbreak setting risk assessment and follow-up action for each outbreak
- 100% site visits within 24 hours of outbreak called
- 1016 preventative visits and 1175 responsive visits (includes remote and on-site visits)

**Prevention and readiness visits**

- work with organisations to develop COVIDSafe plans
- strengthen workplace infection control procedures and protocols, including workforce cohorting
- training of key personnel in IPC
- guidance on hand hygiene, social distancing, personal protective equipment (PPE), cleaning techniques, ventilation, responses to a case
- audits of practices and prevention protocols
- targeted industry engagement

# Continuous improvement through a learning system

## Established improvements

- Specialised **setting-specific outbreak teams** established to manage responses

- **Formal daily risk assessments** of outbreak complexity and consequence considerations

- A **multi-agency Risk Evaluation Meeting (REM)** to rapidly identify and mobilise priority actions

- **Enhanced exposure site publication** and awareness raising approach

- Reporting **new outbreak management metrics and KPIs** to drive improvement

- **Outbreak Management Operation Coordination (OMOC)** established to support rapid, effective multi-agency engagement

- Formal **"lessons learned"** sessions to support ongoing improvement

## Recent improvements

- **'War gaming'** stress testing with the ADF to identify improvement opportunities

- A wrap around **Client Management Service** for each positive case and their associated close contacts

- **Local Public Health Units (LPHUs)** established to enhance local community and primary care engagement in PH response

- Case and contact **Customer Relationship Management (CRM)** to fully digitalise processes, end-to-end

- Enhanced digital solutions to support Case interviews through movement tracking.

- Digital visitor registration to support rapid contact tracing

Every minute counts