

Case Management and School Team

To: Chair and Members of the Board of Health

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Prepared By: April Pollington, Manager of Case and Contact Management

Approved By: Rita Isley, Director Community Health and CNO

Submitted By & Signature: *Original signed document on file*

Dr. Nicola J. Mercer, MD, MBA, MPH, FRCPC
Medical Officer of Health & CEO

Recommendations

It is recommended that the Board of Health receive this report for information.

Key Points

- The COVID-19 Case and Contact Management team was established in March 2020, in response to the presence of COVID-19 in Wellington Dufferin Guelph (WDG).
- The Case and Contact Management Team are responsible for managing the following:
 - Community COVID-19 cases and contacts
 - Outbreaks in community settings, including all workplaces and outpatient settings
 - COVID-19 cases in the hospital setting that are discharged to the community as well as staff
 - COVID-19 cases and outbreaks that occur in the school/childcare setting
- Accountability indicators for this program are determined by the Province as well as by Wellington-Dufferin-Guelph Public Health's (WDGPH's) internal operational plan

Discussion

On January 20, 2020, a new type of Coronavirus was identified in China which was officially declared a Public Health Emergency of International Concern (PHEIC) by the World Health Organization (WHO) on January 30, 2020. The Novel Coronavirus now known as COVID-19, became a reportable disease on January 2, 2020, in Ontario. At that time, the risk to Canadians was deemed extremely low and the morbidity, mortality and transmission risk of the virus was not fully understood.¹ The first presumptive positive case in Canada was found on January 25, 2020, in a traveler returning from Wuhan, China, the suspected point of origin. Locally, the first COVID-19 case in WDG occurred on March 22, 2020.¹ In response to the pandemic declaration and the growing concern for the potentially catastrophic outcomes, WDG formed the Case and Contact Management (CCM) Team. The CCM team started out as a set of 6 different teams which eventually amalgamated into one large team for consistency. Since then, the CCM Team has scaled up and down in size in response to the surge and settling of cases, with supports coming from many different agency teams and professions. Over the course of the pandemic, the team has been comprised of: Public Health Inspectors, Public Health Nurses, Dental Hygienists, Dental Assistants, Health Promotion Specialists, Family Visitors and Program Assistants, to name a few.

Case Management Guiding Indicators and Objectives

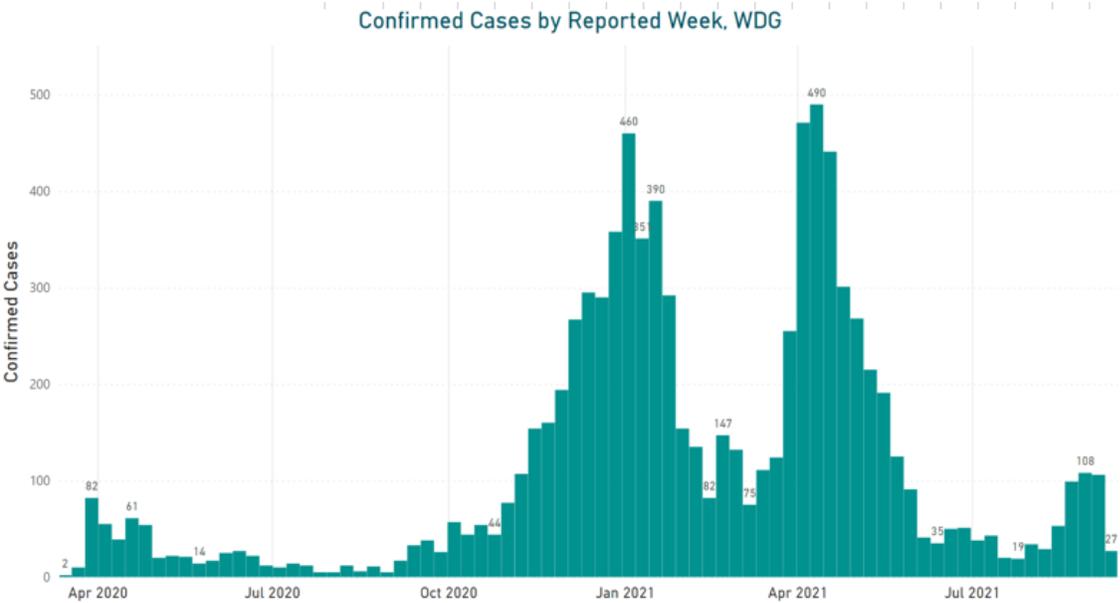
Both the Province and WDGPH have outlined evidence-based performance indicators (*Appendix A*) to assist with guiding the response and ensuring the case and contact management needs are being met². As indicated below, the CCM Team has been able to continue to meet these indicators and objectives by following a surge protocol model³



Case and Contact Management Team Response

Epidemiology of COVID-19 in WDG

Appendix C outlines the regional case counts and deaths by month since the beginning of the pandemic.¹ The graph clearly shows the various waves WDG has experienced and when case management was at its busiest. Recorded case highs occurred in April 2020, January 2021 and again in April 2021. Appendix B breaks the cases down further to reflect the number of cases within each age group.³ During wave 1, the elderly population, specifically those living in retirement and long-term care homes, was disproportionately affected by COVID-19. Over the course of the pandemic, WDG has noted the highest total number of cases (2870 positives) among the 40-64 years old group. A contributing factor is this age group has a large number of essential workers and therefore had a higher number of potential exposure sites. Below highlights the total number of cases for all age groups, recorded week over week in WDG.



Variants of Concern (VOC) have been a driving force in the increased number of cases seen in wave 2 and 3. Currently 98% of COVID-19 cases are currently the Delta Variant (B.1.617).¹

VOC cases in WDG

Investigation Lineage	# of Cases
Alpha Variant (B.1.1.7) w Presumed*	2108
Beta Variant (B.1.351)	1
Gamma Variant (P.1)	66
Delta Variant (B.1.617) w Presumed*	677

With the VOC's, there have been changes to CCM including lowering the threshold for deeming an individual a high-risk contact and completing more rigorous backwards contact tracing to determine acquisition and stop the ongoing spread directly at the source.

Case and Contact Management

Case and contact management (CCM) is a critical component of containing COVID-19. When the team formed in March 2020, the only processes in place were those used for dealing with the currently managed infectious diseases. Many of these processes did not align with the current needs, as they were specifically used for the long-term care and retirement home settings, for example the use of line lists which was not applicable to settings such as workplaces. Processes and guidance were developed for case management in workplaces, community, schools, camps, organized sports and recreation as well as places of worship, to name a few.

The province also introduced new provincial data entry portal (CCM Salesforce) which has helped significantly within the case and contact management role-such as backward contact tracing and in-depth contact follow-up.

Case managers are responsible for the following upon receipt of a positive case:

- Initial and follow-up calls with cases
- Calls to those identified as contacts, to determine low or high-risk status
- Follow-up with workplaces and places where individuals gather, etc. to determine contacts and potential risk
- Providing individuals with resources such as high-risk contact letters, outbreak letters, mental health and isolation supports, and more recently vaccination booking + clinic information

Outbreak Management and Support

This was a unique endeavour as the province did not release community specific sector guidance until June 2020. As a result of cases within workplaces and community settings, several resources and processes were created by WDGPH to support the follow up of positive cases. Case management has managed a total of 130 outbreaks with 948 cases and 2 deaths recorded since the onset of the pandemic.³ (see Appendix D for a more detailed breakdown of sectors with outbreaks recorded)

Outbreak Setting	Number of Outbreaks (Active + Resolved)	Total Cases*	Fatal Cases*
Accommodation Services	1	1	0
Bar/Restaurant/Nightclub and other entertainment venues	21	84	0
Event venues/gatherings/religious facilities	2	10	0
Medical/Health Services (non-institutional)	3	6	1
Personal service settings including hair salons, tattoo parlors, nail salons and spas	1	5	0
Recreational fitness facilities, group fitness classes, team sports and related events	4	21	0
Retail/grocery/malls	12	47	0
Workplace - Farms	3	8	0
Workplace - Offices, warehousing, shipping and distribution, construction, manufacturing	62	678	1
Workplace - Other	21	88	0
Total	130	948	2

Workplace Exposure Package: Created for employers and employees:

- Letter to employers - Prevention Tips for Workplaces
- High Risk Contact Education Handout for employees
- Exposure Notification Letter
- High Risk Contact Flow Chart
- Workplace Safety Checklist

Workplace Telephone Support: The CCM Team would regularly complete daily supportive calls with various workplaces. Collaborations were made with several human resource departments, directors, and even national level managers to ensure support was given for the continued operation of business in the safest way possible. There were often conference calls completed to provide Infection Prevention and Control (IPAC) support, outbreak management recommendations and discuss next steps for testing and isolating.

A big thank you to our community workplaces who have worked so hard thus far to learn outbreak management, implement IPAC measures that didn't exist prior to 2020 and for cooperating to the highest level to support COVID-19 management.

Workplace Site Consultation: Due to the increase in the number of workplace outbreaks and limited Ministry of Labour resources, it was decided a local IPAC supportive response was needed. In partnership with the Environmental Health Team at WDG, supportive IPAC consultation visits were arranged for workplaces that were placed into outbreak.



This process has given IPAC support to businesses who have limited (if any) IPAC knowledge which has undoubtedly resulted in a decrease in the spread of COVID-19. This has prevented more severe outcomes such as higher case numbers, potential fatalities, and uncontrolled outbreaks. It has also allowed for community collaboration and the feeling of support given to our community businesses.

School Case Management Support

The Ministry of Health has provided one-time funding to Boards of Health to support additional nursing capacity to provide rapid-response support to school boards and schools in facilitating public health and preventative measures related to the COVID-19 pandemic.

The School Case Management Support Team started as a separate entity from the General Case Management Team. Due to the surge in school related cases and the follow-up that was needed, these two teams were amalgamated to build capacity and ensure indicators were being met. The aim of the school focused nursing position was to provide IPAC, and COVID-19 support.

From September 2020 to June 2021, WDGPH provided an IPAC consultation visit to 142 different schools. This visit entailed reviewing the adapted Public Health Ontario (PHO) Schools Reopening Checklist, providing support with implementing IPAC recommendations and answering any COVID-19 related questions. If there were any further IPAC supports needed, a second visit was arranged. This second visit occurred for a total of 4 schools. There were 154 IPAC consultation visits completed during September for the 2021/2022 school year.

Some successes that were identified from school case management support were:

- Strengthened relationships with school boards, staff, and the school community
- Immediate action taken to address school exposures including timely dismissal of cohorts and risk assessments, as well as school community communication
- Increased coordination and support
- IPAC in school support: Yearly IPAC supportive visits completed by Public Health Nurses (PHN's) who are trained in IPAC. The intention of this visit is to review the adapted PHO checklist and ensure schools are feeling prepared and supported for reopening.

Conclusion

The effects on WDG have been devastating, to say the least. Like other Regions, Provinces, and Countries, COVID-19 has been responsible for the loss of many lives and has had a catastrophic impact on individuals, families and communities that will never be forgotten.

COVID-19 continues to be a disease of public health significance and success has been achieved by maintaining a manageable number of positive cases through effective contact tracing and case management efforts.

The Case and Contact Management Team will aim to continue to meet all standards set by both the Province and the Agency. The ultimate goal is for COVID-19 to reach a point where it is manageable within the normal operations model and for that model to continue to be followed, in keeping with other reportable diseases.

Ontario Public Health Standard

Infectious and Communicable Diseases Prevention and Control-COVID-19 Case and Contact Management

GOAL

- To prevent or reduce the burden of infectious diseases of public health importance

2020 WDGPH Strategic Direction(s)

Double click checkbox to change from unchecked to checked.

Service Delivery: WDGPH will provide programs and services in a flexible, modern and accessible manner, and will ensure they reflect the immediate needs of clients and the Agency's role in the broader sector.

System Transformation: WDGPH will equip the Agency for change in all aspects of work so that the Agency is adequately prepared for transformational system change when the time comes.

Knowledge Transfer: WDGPH will ensure that the decision-making and policy development efforts are informed by meaningful health data at all times.

Health Equity

Health Equity is the condition where everyone can attain their full health potential and are not disadvantaged due to their social position or other socially determined circumstances.

- The case management program has affected the total population of WDG as everyone was considered vulnerable to this infectious disease. Currently, we are seeing some populations more at risk than others, including: the shelter/homeless population, and vaccine resistant individuals or faith-based organizations. These groups are overrepresented in COVID-19 cases due to their low vaccination rates. Unfortunately, this has resulted in not only increased numbers of COVID-19 cases, a but increased severity of illness, and in some cases, death.
- Creative efforts have been made to engage this population by considering accessibility. These efforts include, calling at certain times of the day, utilizing texting or calling a "friend's number" and arranging for COVID-19 testing at their home or onsite at the shelter, conversations with community representatives and hand-delivery of COVID-19 case and contact management documents.

References

1. Wellington Dufferin Guelph. Timelines. Planning. *Internal Strategic Planning*. [Internet]. Wellington-Dufferin-Guelph Public Health [Cited 2021 September 13].
2. Ministry of Health. Management of Cases and Contacts of COVID-19 in Ontario (V.13). Health System Emergency Management Branch. [Internet]. 2021 August. [cited 2021 September 14]. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/contact_mngmt/management_cases_contacts.pdf
3. Public Health Case and Contact Management System (CCM). Confirmed COVID-19 Case and Contacts, [Internet]. Wellington-Dufferin-Guelph Public Health [Cited 2021 September 13].
4. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Epidemiologic summary: SARS-CoV-2 whole genome sequencing in Ontario, October 12, 2021 [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 October 21]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-sars-cov2-wholegenome-sequencing-epi-summary.pdf?la=en>

Appendix A:

Provincial Case Management Performance Indicators

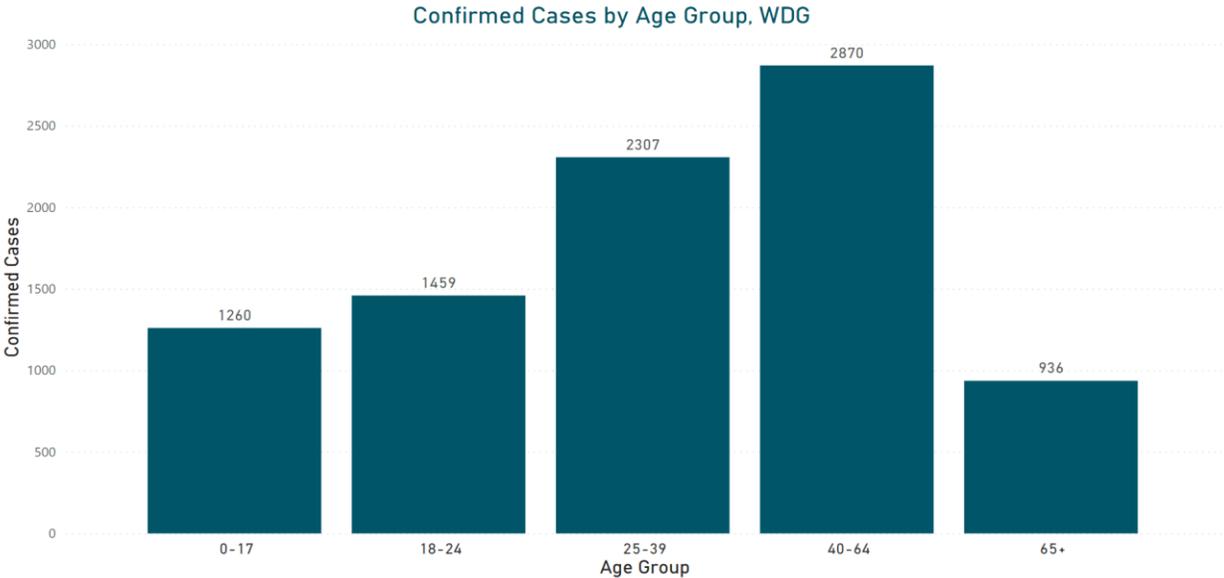
Provincial Performance Indicators	Provincial Indicators Met?
<ul style="list-style-type: none"> • % of cases that are reached within 24 and 48 hours after PHU has been notified. The current target indicator is 90% of cases reached within 24 hours. 	YES
<ul style="list-style-type: none"> • % of newly identified contacts successfully reached within 24 and 48 hours 	YES

Internal Operational Plan Objectives

Objective 1: Keep Case Counts Low	Objectives Met?
<ul style="list-style-type: none"> • Monitor COVID-19 cases, fatalities, health system capacity and public health capacity • Prevent the spread of COVID-19 within the WDG community using COVID-19 data. • Manage COVID-19 cases, contacts, and outbreaks • Maintain case and contact management capacity to meet or exceed Ministry targets 	YES
Objective 2: Protect the Most Vulnerable	
<ul style="list-style-type: none"> • Prevent and mitigate congregate setting outbreaks with local IPAC Hubs. • Control community spread of COVID-19 to help protect the most vulnerable. • Identify priority populations to receive COVID-19 vaccine 	YES
Objective 3: Stay Healthy	
<ul style="list-style-type: none"> • Support all sectors with guidance to prevent COVID-19 transmission • Support informed decision making to control COVID-19 • Minimize secondary pandemic impacts • Support WDGPH staff to stay healthy • Encourage COVID-19 vaccine uptake 	YES

Appendix B

Confirmed Cases by Age Group in WDG Since Beginning of COVID-19 Pandemic



Public Health Case and Contact Management System (CCM). Wellington-Dufferin-Guelph Public Health. Accessed September 13, 2021.

Appendix C

COVID-19 Month over Month Change in Case and Death Count in WDG

2020				
January 0 Cases 0 Deaths	February 0 Cases 0 Deaths	March 0 Cases 0 Deaths	April 288 cases 18 deaths	May 94 cases 17 deaths
June 390 cases 20 deaths	July 47 cases 0 deaths	August 35 cases 0 deaths	September 89 cases 0 deaths	October 222 cases 0 deaths
November 526 cases 4 deaths	December 1275 cases 0 deaths			
2021				
January 1474 cases 32 deaths	February 517 cases 30 deaths	March 535 cases 3 deaths	April 1813 cases 0 deaths	May 903 cases 9 deaths
June 239 cases 10 deaths	July 142 cases 1 death	August 371 cases 0 deaths		

Wellington Dufferin Guelph. (2021). Timelines. Planning. *Internal Strategic Planning*. Microsoft Teams.

Appendix D

Breakdown of Community Outbreaks in WDG

Confirmed WDGPH Outbreaks by Setting

Outbreak Setting	Number of Outbreaks (Active + Resolved)	Total Cases	Fatal Cases
Accommodation Services	1	1	0
Bar/Restaurant/Nightclub and other entertainment venues	21	84	0
Child Care Centre	12	33	0
Event venues/gatherings/religious facilities	2	10	0
Healthcare Institution	16	139	11
Medical/Health Services (non-institutional)	3	6	1
Personal service settings including hair salons, tattoo parlors, nail salons and spas	1	5	0
Private Residence	5	67	0
Recreational fitness facilities, group fitness classes, team sports and related events	4	21	0
Retail/grocery/malls	12	47	0
School	31	142	0
Shelter + Congregate Setting	96	712	71
Workplace - Farms	3	8	0
Workplace - Offices, warehousing, shipping and distribution, construction, manufacturing	62	678	1
Workplace - Other	21	88	0
Total	290	2041	84

Public Health Case and Contact Management System (CCM). Wellington-Dufferin-Guelph Public Health. Accessed September 13, 2021.