

## Information Systems and the COVID-19 Pandemic

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**To:** Chair and Members of the Board of Health

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## Recommendations

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It is recommended that the Board of Health:

1. Receive this report for information.

## Key Points

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- There have been significant impacts across all of Information Systems (IS) programs due to the COVID-19 pandemic.
- Operating plans for 2020 have several initiatives that were suspended or modified.
- Some Accountability Indicators submitted to the Ministry of Health (Ministry) will not be delivered at the desired level or not delivered at all.
- Many services in IS have been suspended since February 2020.

## Discussion

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On November 17, 2019, COVID-19 was detected in China and it soon traveled across the world. The first presumptive case in Canada was in Ontario on January 25, 2020 from an individual that recently returned from Wuhan China. This case was later confirmed at the National Microbiology Lab in Winnipeg on January 27, 2020 to be COVID-19 positive. Wellington-Dufferin-Guelph Public Health (WDGPH) had its first confirmed COVID-19 positive case on March 22, 2020. The Agency activated the Incident Management System (IMS) response to COVID-19 on January 27, 2020.

The IS division consists of five (5) program areas including: Health Analytics, Health Promotion, Healthy Growth & Development, Information Technology and Privacy. Operations across the entire division have been significantly impacted due to the Agency-wide response that was needed to manage the COVID-19 pandemic.

### Health Analytics

The Health Analytics department is responsible for the Population Health Assessment and Effective Public Health Practice standards outlined in the Ontario Public Health Standards (OPHS). All staff in this area have been reassigned to various IMS duties and, therefore, work in both population health assessment and effective public health practice has been paused.

Population Health Assessment includes: i) conducting surveillance, ii) interpretation and communication of identified risks, iii) health status assessment, iv) assessment & program development for priority populations, and v) provision of population health information. Some population health assessment work has been able to continue within Health Analytics, but its focus is solely on COVID-19 and the impact on the community.

Effective Public Health Practice includes: i) program planning and evaluation, ii) evidence-informed decision making, iii) research, and iv) knowledge exchange and communication. All these tasks have been discontinued since WDGPH activated the IMS in early 2020. These tasks will need to be resumed in a staged fashion and are highly dependent on the current state of the community partners that are involved.

Both the population health assessment and effective public health standards are reportable to the Ministry, annually. The progress in these areas will certainly look different when reporting for work performed in 2020.

## Health Promotion

The Health Promotion team has been completely reallocated to the COVID-19 response. Therefore, the programming in the operational plan has not been completed as originally planned. Several areas, affecting several reportable Program Standard areas in the OPHS, have been suspended since WDGPH went into the IMS including: i) Active Living, ii) Health Eating, iii) Injury Prevention, iv) Mental Health Promotion, v) School Health Promotion and vi) Substance Use.

All of the above are requirements under the OPHS and therefore, there is an Agency risk in not meeting the requirements in these areas for 2020.

It is important to note that chronic disease, injury prevention and substance use prevention work remains important in the time of a pandemic. The Health Promotion department works to keep people healthy, and healthy people are less likely to suffer severe complications from infectious diseases. For example, a review of studies by public health experts convened by the World Health Organization on April 29, 2020 found that smokers are more likely to develop severe disease with COVID-19, compared to non-smokers.<sup>1</sup> In many cases in our community, the Health Promotion department is responsible for leading population-wide health promotion work around these health topics, and in some cases, WDGPH is the only organization doing this work. As such, the COVID-19 pandemic response has left a gap in health promotion messaging and support for organizations and policy makers around those topics.

Furthermore, the COVID-19 pandemic and the measures taken around social isolation have the potential to cause or worsen health issues normally addressed by the Health Promotion team including: mental illness, food insecurity and addiction (to name a few).<sup>2</sup> This will be an important departmental focus when things start to resume normal operation.

## Healthy Growth & Development

As a result of the COVID-19 response, all WDGPH's work for the Healthy Growth and Development and Health Equity standards has been put on hold. The Healthy Growth and Development standard includes areas such as: preconception health, healthy pregnancies and parenting. The Health Equity standard focuses on priority population and equity for all within the Wellington, Dufferin and Guelph (WDG) communities and includes initiatives such as: Newcomers program for Low German speaking Mennonites, Bridges out of Poverty and Nurturing Neighborhoods.

It is important to note that the Online Prenatal and New Parent Program is still available for individuals in WDG, although staff are not currently available to update program content.

The COVID-19 pandemic has had a large impact on families including: experiencing pregnancy and/or parenting in isolation, stress, mental health and/or addictions. These secondary impacts of the pandemic or "echo pandemics" represent areas of large public health importance and will need to be addressed as the IMS response changes over time.

## Information Technology

The IT department has been supporting the pandemic response since the beginning. The 2020 IT Operating Plan was adjusted to account for projects that were required immediately to better support the mobile worker and ensure a seamless Agency response. To better support the Agency during this time, the strategic focus was on how to best support a worker for a work-from-anywhere (WFA) situation.

To support WFA, several IT initiatives were pushed forward and completed in an expediated manner. These IT initiatives included: telephony solution upgrade, hardware purchases before worldwide stock shortages, video conference and instant message deployment, VPN load testing and evaluation, network evaluation and upgrade. These items were needed to be done immediately to better prepare WDGPH for what was to come in the initial weeks/months of the pandemic.

The IT ticketing system was overloaded during Q1-Q2 of 2020 with new IT issues from staff that were adjusting to the new normal and learning new roles within the IMS structure. This increased volume of IT tickets, paired with the WFA projects listed above, created a heavy workload for the IT department as they continued to deliver the service level agreement (SLA) that Agency staff have become accustomed to over the past few years.

Re-evaluation of all 2020 projects has been performed and a strategy is in place to move forward for the rest of 2020 and into Q1 of 2021 to ensure best and most efficient timing of initiatives considering the current context. These plans are fluid in order for the department to stay as nimble as possible to support the Agency in these unprecedented times.

## Privacy

Privacy staff have been reassigned to help in the IMS response. Both the decreased capacity in the Privacy department and the decreased capacity of the broader Agency has caused significant delay in the processing times for information requests. The result has been a decreased capacity to perform privacy reviews and privacy impact assessments unless the review is directly related to COVID-19. Additionally, there has been longer response times to privacy breaches. It is important to note that any privacy breach is still being properly mitigated, but notification and investigation cycles are considerably slower due to COVID-19 and the associated operational demands of the IMS response. Aspects of the proactive privacy program (staff training, staff education, privacy events and seminars) are being paused at this time to better focus on the immediate privacy needs and the COVID-19 response.

## Conclusion

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The COVID-19 pandemic response has had a significant impact on the typical functioning of the IS division. All staff have been pulled into the response and it was not until just recently that some non-pandemic response work is able to be performed within certain corporate areas of the IS division. Planning is currently underway to ensure WDGPH is ready for a possible 2<sup>nd</sup> or 3<sup>rd</sup> wave of this pandemic, but various indicators are constantly being monitored to determine when the Agency may be able to start a move back to business as usual.

## Ontario Public Health Standard

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As applicable.

## WDGPH Strategic Direction(s)

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- Health Equity:** We will provide programs and services that integrate health equity principles to reduce or eliminate health differences between population groups.
- Organizational Capacity:** We will improve our capacity to effectively deliver public health programs and services.
- Service Centred Approach:** We are committed to providing excellent service to anyone interacting with WDG Public Health.

**Building Healthy Communities:** We will work with communities to support the health and well-being of everyone.

## Health Equity

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Health equity is an important consideration for all work performed within IS. It is more obvious in the direct Health Equity program work seen in the Healthy Growth & Development department but can be seen in almost every initiative in the division. For example, health equity is seen looking at vulnerable populations in the Youth Survey work in Health Analytics, to IT supporting the infrastructure to allow the interactive reports to be accessible by all to highlight health inequity issues in WDG communities, and Health Promotion's work on Guelph's overdose prevention site.

## References

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1. World Health Organization. WHO statement: Tobacco Use and COVID-19. <https://www.who.int/news-room/detail/11-05-2020-who-statement-tobacco-use-and-covid-19>. May 2020.
2. Ryan B, Coppola D, Canyon D, Brickhouse M, Swienton R. COVID-19 Community Stabilization and Sustainability Framework: An Integration of the Maslow Hierarchy of Needs and Social Determinants of Health. Society for Disaster Medicine and Public Health. Cambridge University Press. April 21 2020.

## Appendices

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N/A.