



Impact of COVID-19 on Public Health Services

November 19, 2021



Northwestern
Health Unit

www.nwhu.on.ca

CONTEXT

Since March 2020, the COVID-19 pandemic has required a significant amount of Northwestern Health Unit (NWHU) resources. To effectively meet this need, NWHU has redeployed almost 100% of staff, at various points, to COVID-19 activities. In Fall 2021, mass immunization clinics relaunched late October continuing to at least March 2022 and require an “all hands-on deck” approach. Simultaneously although our case numbers have generally decreased over time, cases are increasing in complexity and require more staff resources to effectively conduct case management and contact tracing.

NWHU’s COVID-19 response activities combined with pandemic restrictions, have resulted in many public health programs functioning at reduced capacity or halted altogether. This has been seen across the province and is consistent with Ontario’s Ministry of Health’s expectations as well as NWHU’s Business Continuity Plan and Emergency Response Plan. This report provides an overview of the public health activities that have been curtailed or halted during the pandemic, the resources required to catch up these critical services, and the impact of reduced services.

BACKLOGGED SERVICES

For this report a “backlogged” service has a specific time-sensitive lifecycle. When these services do not function at full capacity there is a backlog of clients who must be seen, in addition to new clients that also require services. An example is vaccinations for children between 0-2 years, as a three-year-old child who has not received their 0-2 vaccinations still needs their immunizations. NWHU’s backlogged services are detailed in Appendix 1.

Generally, reducing public health services results in worsened health of our population and communities, for example increases in the instances of infectious diseases may be seen in short term. The immediate need is to address the backlog of services and address the impacts of service interruption over time. Addressing this backlog is part of NWHU’s overall COVID-19 recovery strategy. We anticipate, given the amount of COVID-19 work that is still ongoing, we will begin addressing the backlog in mid-2022 and have all backlogs cleared by March 31, 2024.

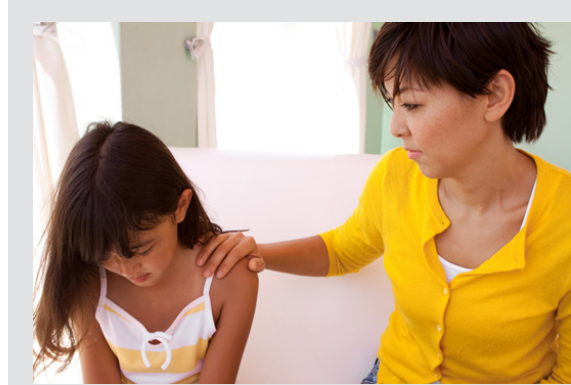
REDUCED SERVICES

“Reduced” services are services that were not functioning at full capacity to accommodate the activities associated with pandemic response. These services may have been completely paused, but do not have a lifecycle that is seen with backlogged services. They need to be restarted and may have ongoing work that requires catch-up due to the pause or reduction in work completed. Due to the staffing and human resource requirements to provide an effective COVID-19 response, most of NWHU’s services have been significantly reduced during this time. An example of a reduced service is a premise that did not receive a routine health inspection. Reduced services are detailed in Appendix 2.

As a result of the work required to effectively respond to COVID-19, we are protecting the health of our communities in the short term but failing to build population resiliency against longer term poorer health outcomes. We are currently seeing the impact in our communities of the public health services that were reduced combined with the necessary public health measures

that were implemented. These impacts are being seen province-wide and include: worsened mental health outcomes (specifically in children and youth); increased substance use (also seen in youth); and widening of existing systemic gaps with the greatest burden of hospitalization and illness seen in marginalized communities (alPHa, 2020). In fact, Sick Kids and the University of Toronto reported that 70% of children have experienced worse mental health during the pandemic (Crosbie, 2021).

Locally, we have data that shows the increased severity of the opioid crisis and death, with opioid overdose ER visits increasing from 67.1 per 100,000 in 2019 to 146.3 per 100,000 in 2020 (MOHLTC, 2021) and opioid deaths increasing from 11.0 per 100,000 in 2019 to 20.7 per 100,000 in 2020 (PHO, 2021). We have also seen an increase in screen time and decrease in physical activity in youth, with the percentage of high school students meeting physical activity guidelines dropping from 71% in 2018-2019 to 58% in 2020-2021 (NWHU, 2021). These impacts can be quantified right now but many impacts from reduced public health services will not be seen for many years as these services are designed as early interventions to maximize the impact they deliver on the life course. For example, since health promotion services achieve their outcomes over longer periods of time and can target chronic disease, which take years to emerge, we expect the impact of curtailing these services and the toll of the pandemic to be visible for years to come.



Sick Kids and the University of Toronto reported that 70% of children have experienced worse mental health during the pandemic.

MOVING FORWARD

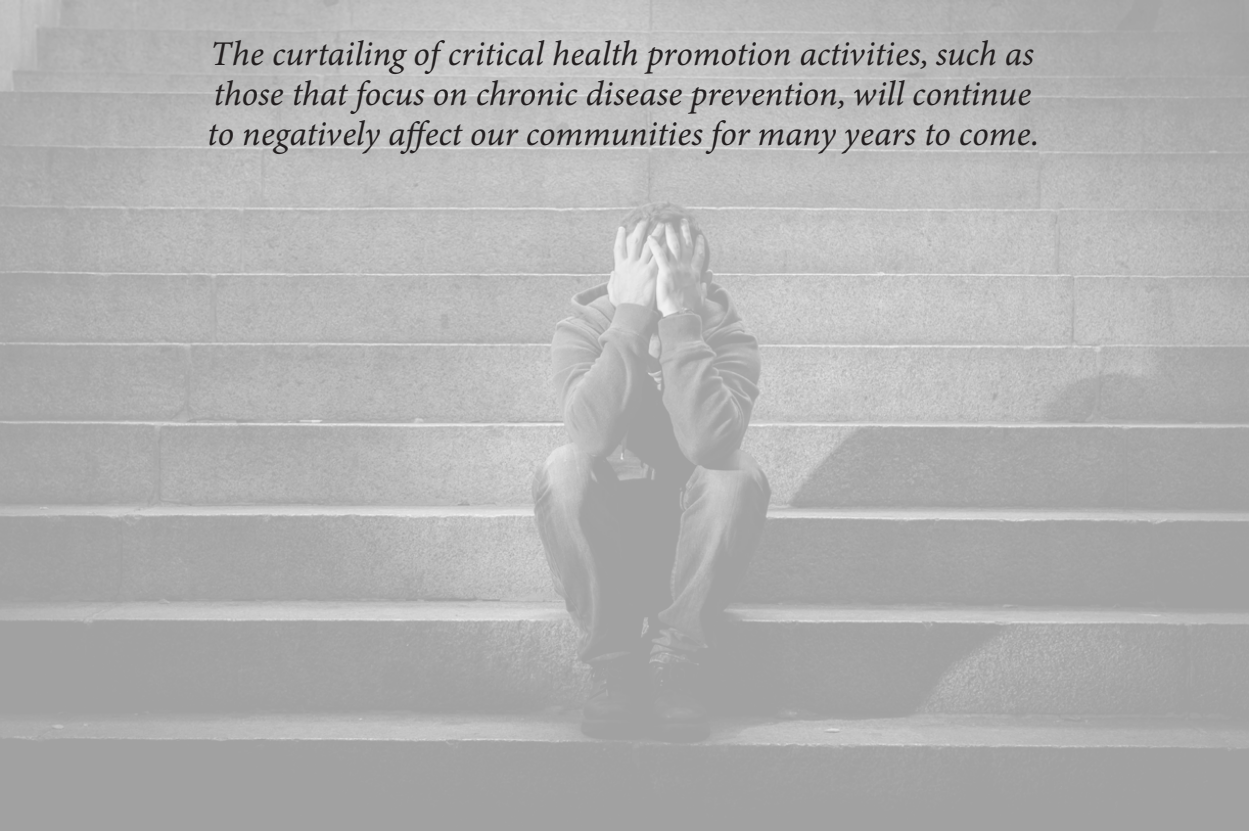
The scope of public health is extremely diverse and expands beyond health protection services like vaccination. As we look to COVID-19 becoming endemic, we also must consider how to catch up on critical public health services that were reduced or paused during the pandemic. These services are vital for the population's health both now, to deal with crises that have been exacerbated by the pandemic such as deteriorating mental health and increased substance use, but also in the future. The curtailing of critical health promotion activities, such as those that focus on chronic disease prevention, will continue to negatively affect our communities for many years to come.

Although there are several barriers and challenges to addressing the backlog and reduction of public health services, the primary barrier is human resources. Recruitment and retention of staff working in public health has always been difficult in northern Ontario, however it has become more challenging during the pandemic. Since existing staff have been, and continued to be, redeployed to COVID-19 work; service backlogs and reductions will continue unless more staff are onboarded and trained. To date, NWHU has not used extraordinary costs and one-time funding to the same extent as other public health units in Ontario to secure additional staff.

Sustained multi-year funding over a minimum of two years (to March 2024) to successfully recruit, train, and retain staff is necessary to catch up and reinstate all public health services while accommodating for any unknowns, as there is an indication that other health challenges, like mental health and addictions, could present quickly during this time and require additional resources to address. Recovery from COVID-19, clearing backlogs, reinstating services, and ensuring a strong public health system to serve the residents of northwestern Ontario requires additional FTE, including HR and management capacity.

Public health requires ongoing support to meet the demands of COVID-19 and provide critical services that have been impacted during the pandemic. Both activities are necessary to ensure a healthy community right now and in the long term. To meet these needs NWHU will prioritize all backlogged or reduced services based on risk and requires:

- Ongoing collaboration and support from community partners;
- Ongoing and maintained provincial support for coordinated pandemic response;
- Ongoing COVID-19 one-time funding support to maintain response activities;
- One time recovery funding to assist in clearing backlogged services; and
- Increases to base funding; recognizing that COVID-19 may continue to be a disease of public health significance and thus become a permanent part of NWHU's workload, and that recovery and the long-term impacts of the pandemic will last many years if not decades.



The curtailing of critical health promotion activities, such as those that focus on chronic disease prevention, will continue to negatively affect our communities for many years to come.

FURTHER INFORMATION AND READING

- Kid's Mental Health and COVID-19 from Dr. Jennifer Crosbie (SickKids Research Institute and the University of Toronto): <https://www.youtube.com/watch?v=rBwzUlrCCUQ>
- COVID-19 impact on mental health from Mental Health Research Canada: <https://www.mhrc.ca/national-polling-covid>
- Opioid-related morbidity and mortality in Ontario tool from Public Health Ontario: <https://www.publichealthontario.ca/en/data-and-analysis/substance-use/interactive-opioid-tool>
- Health equity and COVID-19, alPHA statement: https://cdn.ymaws.com/www.alphaweb.org/resource/collection/822EC60D-0D03-413E-B590-AFE1AA8620A9/alPHA_Statement_COVID_Equity_250620.pdf

REFERENCES

Association of Local Public Health Agencies (alPHA). 2020. alPHA statement: health equity and COVID-19. Available from: https://cdn.ymaws.com/www.alphaweb.org/resource/collection/822EC60D-0D03-413E-B590-AFE1AA8620A9/alPHA_Statement_COVID_Equity_250620.pdf.

Crosbie J. 2021. Changing childhoods: the impact of the COVID-19 pandemic on children's mental health. SickKids Research Institute. University of Toronto.

Ministry of Health and Long-Term Care (MOHLTC). 2021. Emergency Room Visits [2019-2020]. IntelliHEALTH Ontario. Date Accessed: November 4, 2021.

Northwestern Health Unit (NWHU). 2021. Compass results, 2020-21 school year.

Public Health Ontario (PHO). 2021. Interactive Opioid Tool. Date Accessed: November 4, 2021. Available from: <https://www.publichealthontario.ca/en/data-and-analysis/substance-use/interactive-opioid-tool>.

APPENDIX 1

Backlogged services resulting from COVID-19

The following table outlines the services that are backlogged and quantifies the backlog, where possible. Backlogged services have not been listed in any particular order. We anticipate, given the amount of COVID-19 work that is still ongoing, we will begin addressing the backlog in mid-2022 and have all backlogs cleared by March 31, 2024.

Service	Backlog
Immunizations for grades 7-10 students (HPV, Meningitis, Hepatitis B), high school immunization booster doses, and immunizations for JK/SK students from 2020-2021	<ul style="list-style-type: none">• 2,167 students in grades 7-10 (plus any students who have entered grade 7 in Sep/21).• 1,257 students in high school (plus any students who have entered high school in Sep/21).• 815 JK/SK students (plus any students who have entered JK in Sep/21).• To fully catch up on the immunization backlog, 16 immunizers will be needed until the end of 2023. We currently have 10 Public Health Nurses (PHNs), therefore an additional six 1.0 FTE PHNs are required.
Speech and language assessments and interventions for referred children prior to school entry	<ul style="list-style-type: none">• Waitlists vary by community. We currently have 122 children waiting for service across the region. This translates to 244 initial appointments (onboarding and assessment). Treatment appointments will vary by each individual child.• To fully catch up on the backlog, which will take several months as it is estimated to be approximately 3843 hours of total clinical time needed, all Speech and Language staff to be released from COVID-19 work and fully reinstated to program activities. We are also planning to increase one 1.0 FTE for a Speech Language Pathologist.
Audiological follow-up for infant hearing services	<ul style="list-style-type: none">• Currently 12 children on the waitlist for time sensitive services. Families waiting for services are primarily from the Far North, and have been unable or are reluctant to travel due to COVID-19.• Will require Infant Hearing staff to reach out to families again and confirm travel arrangements, will use new Infant Hearing Program Audiologist contracted through Sioux Lookout First Nations Health Authority to assist with follow up.
Small Drinking Water System inspections	<ul style="list-style-type: none">• Inspections will be prioritized by risk.• It will take approximately until Summer 2023 to catch up.
Food safety training	<ul style="list-style-type: none">• For individuals who need to take the course to remain current with food premise regulation.

APPENDIX 2

Reduced services resulting from COVID-19

The following table outlines the services that were reduced due to COVID-19 and outlines the catch-up required to clear the backlogs. Reductions in services have long term ramifications for public health. Reduced services have not been listed in any particular order.

Service	Catch-up required due to COVID-19
Youth access tobacco inspections and tobacco vendor inspections	<ul style="list-style-type: none"> No youth access inspections have been completed throughout the pandemic. It is expected that an increase in the number of Smoke Free Ontario Act inspections as well as length of time to complete the inspections will be required for approximately 2 years post pandemic as compliance has waned.
Routine inspections for food safety, infection control, healthy environments, and safe water	<ul style="list-style-type: none"> Minimal inspections have been completed throughout the pandemic and provincial mandates have not been met through all reporting periods, usually we conduct inspections for food premises, beaches, pools, and small drinking water systems. It is expected that an increase in the number of inspections as well as the length of time to complete the inspections will be required for approximately 2 years post pandemic as compliance has waned.
Treatment and preventative dental services with mobile dental office and community clinics	<ul style="list-style-type: none"> Minimal services were offered during the pandemic and only just recently resumed to a limited capacity, it is expected there is an increase in dental needs. Services needed for Ignace, Pickle Lake, Dryden, Sioux Lookout, Fort Frances, Rainy River, Lac Seul, Mishkeegogamang, Vermilion Bay. Enrollment and navigation for Ontario Seniors Dental Care Program
Preschool and school dental services (oral health screenings, assessments, referrals to public dental programs, and preventative services)	<ul style="list-style-type: none"> School dental services (including the fluoride varnish program, pit and fissure sealants, cleanings, brushing programs) have not been offered since March 2020. Enrollment and navigation for Healthy Smiles Ontario and Children's Oral Health Initiative It is expected there is an increase of unmet dental needs throughout the region. To fully resume services and meet needs, it will take approximately two full school years.
Healthy Babies Healthy Children (HBHC) program components including home visits to support families on the blended home visiting program	<ul style="list-style-type: none"> HBHC services have been impacted. Interactions that normally take place in the home such as screening and assessments, service planning, and home visiting for families screened with risk decreased, or were modified to be virtual, during COVID-19. Screening and assessment is best done when face to face with families. Families on the blended home visiting program benefit from bi-weekly home visits at a minimum.

Service	Catch-up required due to COVID-19
Child and reproductive health services	<ul style="list-style-type: none"> • Services and supports offered for both child and reproductive health programs have operating on very limited capacity, including: education and support to families on topics such as breastfeeding, preconception health, preparation for parenting, and healthy growth and development; collaboration with partners to plan and develop services; and referrals for families to access partner services. • Essential services continue including: virtual prenatal education, distribution of prenatal supplement and milk vouchers, and prenatal screening. • Regular services and supports are needed in all communities.
Sexual health and harm reduction clinics and outreach services	<ul style="list-style-type: none"> • Clinics and services (such as sexually transmitted infection testing and treatment, pregnancy tests and counselling, outreach to vulnerable community members, Narcan training to partners and clients, and needle exchange and pick up) decreased during COVID-19. • Regular services needed again for all communities.
Comprehensive school health program	<ul style="list-style-type: none"> • Suspension of skill building programs for children and youth in all school health standard topic areas including healthy eating, physical activity, and substance misuse. • For example: there are currently 9 teachers/service providers waiting to take the train the trainer food literacy training program You're the Chef.
Chronic Disease Prevention programs and services have been put on hold	<ul style="list-style-type: none"> • Many services and programs have been suspended, for example: falls prevention, eating disorder prevention pilot, car seat inspections, suicide prevention training, mental health presentations and service provider event. • Essential programming continues such as: smoking cessation (Ready to Quit), nutrition programs for children and youth, and extreme weather supports for vulnerable populations.
Epidemiological surveillance and reporting of infectious diseases	<ul style="list-style-type: none"> • Ongoing data entry and analysis required to produce reports including monthly infectious disease surveillance and weekly overdose surveillance were paused to support COVID-19 epidemiological work that was required. • Larger projects were also paused including analysis and writing of several population health reports on public health issues of interest, including health equity and adult mental health.
Non-COVID-19 work with community partners	<ul style="list-style-type: none"> • NWHU staff typically participate in community coalitions and provincial working groups as well as collaborate with community partners on projects like community gardens or services like presentations in schools. • As partners start to resume regular services, NWHU has very limited capacity to partner, support, and provide programming since staff are still predominately dedicated to COVID-19 work.