

Update on actions to address the impacts of the COVID-19 pandemic on the health of school-aged children and youth in Toronto

Date: August 28, 2023

To: Board of Health

From: Medical Officer of Health

Wards: All

SUMMARY

Building on the [2022 report \(Item HL36.3\)](#) about the health status of school-aged children and youth, this report provides an update with current evidence on health status for this population. The report provides an overview of the current programs operated by teams across Toronto Public Health (TPH) to support the health needs of school-aged children and youth, and key priorities and actions for the future.

Toronto Public Health children and youth programming is guided by various laws and protocols, including the Immunization of School Pupils Act and the Ontario Public Health Standards. Toronto Public Health programs that promote the health of school-aged children and youth include immunizations, dental, sexual, mental and nutritional health services that are accessed in schools and community clinics.

As documented in [Toronto's Population Health Profile](#), the most recent evidence shows that mental health and well-being, physical inactivity and increased screen time, and overdue student immunizations and dental screening are health challenges for school-age children and youth. While TPH has targeted resources and interventions to address these challenges in partnership with school boards, many of the health issues affecting youth must be addressed through actions and resources from systems such as the education and clinical health care systems that are beyond the scope of local public health services.

Student mental health is one area where immediate additional attention is needed, as the mental health supports available in schools may not be sufficient for students that require intensive interventions. To this end, this report recommends that the Board of Health advocate to the provincial government for support to enhance pathways to mental health care for students that need it.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

1. The Board of Health request the Medical Officer of Health to continue to work with Toronto school boards to monitor data on the ongoing health impacts of the pandemic and collaborate on joint initiatives to improve the health of school-aged children and youth.
2. The Board of Health request the Province of Ontario to work with education system partners to address wait times and increase priority access to care for students requiring intensive mental health interventions and supports within the community that exceed those available through school systems.

FINANCIAL IMPACT

There is no financial impact associated with the adoption of the recommendations in this report.

DECISION HISTORY

At its meeting of April 11, 2022, the Board of Health considered Item 2022.HL36.3 "Health Impacts of the COVID-19 Pandemic on Children and Youth" and requested that TPH report back to the BOH in the second quarter of 2023 with an additional update on the health status of children and youth and the TPH programming addressing these issues. <https://secure.toronto.ca/council/agenda-item.do?item=2022.HL36.3>

At its meeting of March 21, 2022, the Board of Health adopted item 2022.HL35.7 "Request for Update on the Impact of the COVID-19 Pandemic on Children and Youth." The Board of Health requested the Medical Officer of Health to report to the Board of Health meeting on April 11, 2022 with an update on the impact of the COVID-19 pandemic on school-aged children and youth and current programs operated by Toronto Public Health to support this population, and any recommendations for the Board's consideration. <https://secure.toronto.ca/council/agenda-item.do?item=2022.HL35.7>

COMMENTS

The health and well-being of school-aged children and youth has been a priority for the City of Toronto from the earliest days of the Department of Health. In the early 1900s, Toronto's health and education officials began to concern themselves with the health of children of low-income families living in the city's crowded slums. In 1910, the Board of Education began to deliver medical and dental examinations and oral health education in schools. In 1917, the Department of Public Health took over this service. By 1925, the

proportion of students with dental issues had been reduced from 97 percent to 66 percent, and those that continued to present with dental issues had fewer cavities.

From 1913 until 1963, the Department of Health and the Board of Education worked together to accommodate children's special health needs in schools. This was addressed with programming in outdoor school programs tailored to the needs of children who were exposed to tuberculosis, had poor nutrition, or faced emotional, physical, or social challenges. In outdoor schools, students could be exposed to fresh air, receive hot meals, and education, including how to build healthy habits. The aims of the school health program were to control communicable diseases, identify and correct health problems, and teach children how to look after their own health. Children also received free vaccinations to ward off disease, enabling them to reach adulthood. Over the past 140 years, these programs have become the School Health, the Oral and Dental Health Services, and the Vaccine Preventable Diseases programs, which provide programming to support school-age child and youth health in collaboration with schools.

Toronto Healthy Schools Strategy

The Toronto Healthy Schools Strategy is an agreement between TPH and the four publicly funded school boards in Toronto: Toronto District School Board, Toronto Catholic District School Board, Conseil scolaire Viamonde, and Conseil scolaire catholique Mon Avenir. During the 2022-23 school year, TPH renewed the Healthy Schools Strategy for four years, until the end of the 2025-2026 school year. This Strategy formalizes the commitment of all partners to engage in collective action to support student well-being through the creation of healthy school environments for children and youth. Its goals are to strengthen the partnership between TPH and the School Boards, establish a workplan with shared goals, share data and communicate on joint initiatives, and conduct further research on the health of students, including their mental health and well-being.

As a complement to the Healthy Schools Strategy, TPH uses the [Foundations for a Healthy School](#) model, an evidence-based approach recommended by Province of Ontario Ministry of Health's [School Health Guideline, 2018](#). School public health services are universally available to all publicly funded schools in Toronto, and they have access to the following services:

- online curriculum supports and resources,
- Foundations for a Healthy School tools and resources,
- Public Health Nurse assessments, consultations, and school staff capacity building, and
- other TPH school health services (i.e., oral health, immunizations, infection prevention and control, etc.).

Toronto Public Health categorizes publicly funded Toronto schools using the School Boards' data to identify the relative level of need of a particular school community for the purpose of supporting higher-needs schools more intensively. School Liaison Public Health Nurses then work with these schools (e.g., school administration, teachers, other school service providers, and community partners) to develop School Health Profiles,

which include demographics, and current school health priorities such as vaccination and physical activity rates.

The following report sections provide an update on the current health status of school-age children and youth and details on how TPH delivers School Public Health Services. The report describes TPH's current plans to promote and improve School Public Health Services and child and youth health outcomes through partnerships. Although TPH continues to recover and provide catch-up child and youth public health services, the literature indicates that the health and well-being of school-age children and youth remains a concern and warrants rigorous and consistent effort to improve population outcomes.

2. Current Health Status of School-Aged Children and Youth

Mental health and well-being have been negatively impacted by the COVID-19 pandemic and remain a concern for children and youth.

As previously reported in [Item 2022.HL36.3](#), the pandemic disruptions to in-person learning and school-based services contributed to mental health impacts on children and youth, with substantial proportions of students reporting concerns about their mental health, coping skills, and needs for support⁶. More recent data show that mental health concerns were especially prominent among children and youth facing barriers, including international students, students with special needs, students facing discrimination, and those in families with lower household income and parental education rates¹.

Data released in the past year (Toronto's Population health Profile (2023), Ontario Student Drug Use and Health Survey (OSDUHS) (2022) and the 2022 ParticipACTION Report Card on Physical Activity for Children and Youth) provide additional insight into these concerns and reaffirm student mental health as an area requiring a significant response. The 2021 OSDUHS of grade seven to twelve students revealed that nearly half (47 percent) of Ontario students reported a moderate-to-serious level of psychological distress, while over one-quarter (26 percent) reported a serious level of psychological distress. More concerning, one-in-five (20 percent) students reported harming themselves on purpose, while almost the same proportion (18 percent) reported that they seriously contemplated suicide³. Prior to the pandemic, 44 percent of students reported very good or excellent mental health. In 2019, 16.7 percent of students (grade 7-12) seriously contemplated suicide in the prior year¹. Hospital data showed emergency department visits related to self-harm among children and youth in Toronto increased by 30 percent in the first year following the start of the pandemic¹. Nearly half of Ontario students report that in the recent past they wanted to talk to someone about a mental health problem but did not know where to turn³.

Toronto Public Health's efforts in schools are focused on prevention and promoting mental health and well-being among children and youth. However, for students experiencing serious mental health concerns and psychological stress, clinical services are needed. A concerted and coordinated effort by the health care and educational

systems, with support from the provincial government, is needed to enhance pathways to care and meet the demand for these critical services.

Links between mental health outcomes and food insecurity

There is a growing body of evidence that suggests that household food insecurity is linked with negative mental health outcomes for children and youth. One study found that children and youth in households with food insecurity were 55 percent more likely to seek professional support for a mental or substance use disorder⁴. While TPH's Student Nutrition Program provides much-needed nutritious food to students in Toronto, the full demand for subsidized school meals remains unmet and is the subject of ongoing advocacy to the provincial and federal governments (see [Item 2023.HL4.2](#)).

Substance misuse among school aged children and youth has remained stable.

The OSDUHS indicates that while most Ontario students do not report drinking alcohol or using drugs, of those who do, the most-used substances among grade 7-12 students are high-caffeine energy drinks (33.1 percent), alcohol (31.8 percent), and cannabis (17 percent)³. Roughly 8 percent of students reported binge drinking (consuming five or more drinks on the same occasion) at least once in the past month before being surveyed³, a decrease from 9.8 percent in 2019¹.

15.3 percent of Ontario students report vaping in the past year³. Of those that report vaping in the last year, the majority (84 percent) report vaping nicotine, a substance that should only be accessible to those aged 19 and older, an increase from 56 percent in 2019³. One-in-seven (14 percent) secondary school students report that they used cannabis to cope with a mental health concern at least once in the past year³. This is similar to the 2019 (pre-pandemic) rate of 14.6 percent of students (grades 7-12) that reported using cannabis in the last year.

There has been a notable decline in physical activity among children and youth since the beginning of the COVID-19 pandemic and screen time has increased.

Results from the Canadian Community Health Survey indicate that 37 percent of youth aged 12-17 years are meeting the recommended 60 minutes of moderate-vigorous physical activity daily, down from 51 percent before the pandemic².

Declines in physical activity were more notable in youth (ages 12-17) than children (ages 5-11) and were significant for youth living in urban areas, and Indigenous and immigrant youth. The percentage of Indigenous youth meeting the physical activity recommendations fell from 67 percent pre-pandemic to 38 percent during the pandemic. The percentage of immigrant youth meeting the physical activity recommendations decreased from 56 percent pre-pandemic to 35 percent during the pandemic².

There has been an increase in screen time use for children and youth since the beginning of the pandemic. Over 88 percent of students spend three hours a day in front of a screen in their free time ("recreation screen time") and 31 percent spend over five hours on social media daily, an increase from 21 percent in 2019³. The increase in students' screen time has resulted in an increase in students reporting being cyber

bullied (22 percent in 2019 compared to 30 percent in 2021), and in the number of students reporting moderate-serious or serious problems with technology use (24 percent)³.

In addition to social media use, students are also engaging in video gaming for extended periods of time. About 24 percent of students reported playing video games for over five hours a day, an increase from 11 percent in 2019, resulting in 20 percent of students meeting the criteria for a video gaming problem³. In boys, higher frequency of video or instant messaging was associated with overall lower general mental health⁵.

Progress has been made to catch students up on routine immunizations in Toronto but achieving a return to pre-pandemic levels requires more work.

Immunization of School Pupils Act (ISPA) and Assessment of Required Vaccinations

The delivery of Ontario's publicly funded routine infant and childhood immunization programs were impacted for the 2019-20, 2020-21 and 2021-22 school years, due to decreased access to in-person health care appointments and the redeployment of public health resources to the pandemic response. School immunization clinics and ISPA assessments by TPH were both interrupted.

The ISPA requires that students receive and report vaccinations or otherwise provide a valid medical, religious, or conscience exemption as a condition of attending primary or secondary school in Ontario. Vaccination against the following diseases is required under the ISPA: Diphtheria, Tetanus, Polio, Measles, Mumps, Rubella, Meningococcal Disease, Pertussis (whooping cough), and Varicella (chickenpox) (for children born in 2010 or later).

As of July 2023, ISPA vaccine compliance rates for children in grades 2, 11 and 12 were 43.4 percent, 22.8 percent and 21.9 percent, respectively, which reflect significant declines in vaccine coverage since the COVID-19 pandemic began. These trends in ISPA vaccines are consistent with the provincial rates published by [Public Health Ontario](#) in July 2023.

For Toronto students in grade 2 (aged 7 years old) there were:

- Large declines in immunization against measles, mumps, varicella, diphtheria, tetanus, pertussis, and polio, reflecting missed doses of required boosters against these diseases that children usually receive at 4 to 6 years of age.
- Smaller declines in immunization against rubella, Haemophilus influenzae type b, pneumococcal and meningococcal disease, since these doses are provided before school entry, which for these children occurred prior to the pandemic.

For Toronto students in grade 12 (aged 17 years old) there were:

- Declines in immunization against diphtheria, tetanus, and pertussis, reflecting missed doses of the adolescent Tdap booster, which is usually given at 14 years of age.

- Rates of immunization against measles, mumps, rubella, and polio were consistent with pre-pandemic rates since these vaccine doses are given at 4 to 6 years of age and their schedules were not interrupted by the pandemic.

Vaccine doses were missed during the pandemic regardless of the age of school children and the vaccine type. This is now reflected in Toronto coverage rates from the 2020-21 and 2021-22 school years. However, it is important to note that vaccine coverage rates only include vaccines that have been reported to TPH by students and parents. It is therefore difficult to determine if lower coverage rates are due to underreporting by parents, or if vaccination rates are indeed as low as the coverage rates suggest¹. While parents and caregivers are being encouraged to report their children's vaccination records to TPH, the implementation of a universal vaccine registry used by providers, parents, students, and health units would simplify the reporting and assessment process and help avoid data gaps. A universal vaccine registry could facilitate a more accurate picture of the state of immunization coverage in Toronto and Ontario.

School-based Vaccinations

Meningococcal, Human Papillomavirus (HPV) and hepatitis B vaccines are offered as part of the School Immunization Program (SIP) to grade 7 students. Meningococcal vaccination is required under the ISPA. The HPV and hepatitis B vaccines are not required in the ISPA but are highly recommended by the National Advisory Committee for Immunization.

Before the COVID-19 pandemic, vaccination coverage in Toronto for SIP vaccines was in-line with, and in some cases exceeded, the provincial average. In 2017/2018, SIP vaccination rates among Toronto 7th graders for Meningococcal, Hepatitis B, and Human Papillomavirus (HPV) vaccines were 86 percent, 77 percent, and 66 percent, respectively, while the provincial averages were 82 percent, 69 percent, and 60 percent, respectively. Prior to the pandemic, vaccination coverage against HPV in Toronto 7th graders was on an upward trend⁹.

Due to the impact of the pandemic on routine school vaccine clinics and access to health services, Toronto saw a steep decline in SIP vaccine coverage. For example, during the 2020-21 school year, only 1 percent of 12-year-olds were up-to-date with the HPV vaccine series in Toronto, similar to the provincial average of 2.6 percent⁸. Since June 2022, TPH has focused on helping students in grades 7-12 catch up on school-based vaccinations. Catch-up has involved notification letters to families to inform them of missing doses and information about where they can receive those doses at TPH clinics. In January and February 2023, TPH issued about 67,000 letters to parents of children and youth in grades 9 to 12 on missing doses of SIP and childhood vaccines.

At the end of the 2022-23 school year, SIP vaccination rates among Toronto 7th graders for Meningococcal, Hepatitis B, and Human Papillomavirus (HPV) vaccines had increased. These rates for Meningococcal, Hepatitis B, and Human Papillomavirus (HPV) vaccines were respectively, 74 percent, 65 percent and 60 percent⁸. These rates are still not at pre-pandemic levels (see above), but they do reflect the diligent work of TPH teams and a collaboration with the health care system to get eligible students

caught up on SIP vaccines. Throughout the 2022-23 school year, the SIP program held 1100 clinics, reached 560 unique schools, 54,967 students, and administered 114,523 vaccines. In June 2023, approximately 58,000 letters were sent to grade 9 to 12 students with information about TPH immunization clinics offered over the summer months.

Dental and oral health services

In the 2022-2023 school year, TPH gradually resumed school dental and oral health screening services. Children in junior kindergarten, senior kindergarten and grade 2 were screened at all public schools, and children in grades 4 and 7 were also screened in schools with previously recorded high rates of dental caries (tooth decay). In total, 73,451 children were screened. Of those, 4,323 children were identified with urgent needs for dental care and 22,366 were identified with dental concerns. Toronto Public Health also initiated a pilot dental school screening program for youth in grades 7 and 8 occurring in tandem with the Hepatitis B, HPV, and Meningococcal vaccinations currently being provided in the TPH Mass Immunization Clinics.

These data show a slight upward trend in children identified with urgent needs, which can be attributed to the break in screening and service navigation that occurred during the pandemic. Since the resumption of services, backlogs present a barrier to optimal service and to the improvement of dental health outcomes for children and youth.

3. Toronto Public Health will continue to promote School Health Services during the 2023-24 school year

During the upcoming school year, TPH will be focusing on six health promotion and prevention topic areas based on need and impact, as determined through data analysis, surveillance, and consultations with school boards and TPH staff. These topics include:

- mental health and well-being,
- preventing infectious diseases,
- nutrition,
- physical activity,
- sexual health, and
- substance misuse prevention.

Using the Foundations of a Healthy School framework, TPH staff will collaborate and support school champions to assess, plan and implement various public health services and programming using a youth engagement approach and school capacity building activities. In addition, staff will work with school communities using evidence-based youth and parent/family engagement frameworks with the aim of increasing home, school and community connections.

Moving into the 2023-2024 school year, TPH will continue immunization catch-up efforts to increase protection for students. Additionally, TPH plans to screen students in all elementary school grades for oral health, and aid children identified with dental care needs by assisting families with the process of finding a dental provider and establishing oral health habits at home.

4. Next Steps

Toronto Public Health continues to make extensive efforts to support the health and well-being of Toronto's school-aged children and youth. Through ongoing partnerships with school boards, schools, and community agencies, TPH will respond to the public health needs of the school-aged population. Toronto Public Health will continue to dialogue with the provincial government about ongoing need for enhanced resources to effectively allow this population to recover and thrive after the pandemic. In partnership with the four publicly-funded school boards, TPH will prioritize the use of data and evidence to determine the most effective services and strategies to improve the health and reduce health inequities among the school aged child and youth population.

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SIGNATURE

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ATTACHMENTS

Attachment 1: References

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