Greater Hamilton Health Network

Building community health together.

An Evidence-Based Position on Harm Reduction
December 2024

Developed by the Greater Hamilton Health Network (GHHN) Harm Reduction & Safe Supply Working Group.

The Greater Hamilton Health Network recognizes the disproportionate impact that the drug supply and overdose crisis has had on our community. Since the opioid overdose crisis was declared a national public health emergency in 2016, Hamilton has consistently experienced higher rates of opioid-related death than Ontario provincial average (63% higher in 2022). In 2023, there were 149 probable or confirmed opioid-related deaths in Hamilton. These deaths are preventable, and the GHHN is committed to doing more to ensure the safety of our valued community members.

The Greater Health Hamilton Network recognizes the following definition of harm reduction:

Harm reduction refers to policies, programs and practices that aim to minimize the negative health, social and legal impacts associated with drug use, drug policies and drug laws. Harm reduction is grounded in justice and human rights. It focuses on positive change and on working with people without judgement, coercion, discrimination, or requiring that people stop using drugs as a precondition of support (Harm Reduction International).

The Greater Hamilton Health Networks recognizes that harm reduction and substance use treatment exist on the same continuum of essential services that must exist in order to prevent further harms from the toxic drug crisis. Acknowledging the need to adopt evidence-based and proven interventions, the Greater Hamilton Health Network recognizes the following as essential services in our community:

- Opioid agonist therapy (methadone, buprenorphine/naloxone, slow-release oral morphine) is standard of care treatment for opioid use disorder and is life-saving (Evidence Brief Point #1). People with opioid use disorder must have low-barrier, timely access to opioid agonist therapy wherever they seek care, including community clinics, primary care, emergency departments, and while admitted to hospital.
- Naloxone is highly effective at reversing opioid overdoses and is a life-saving intervention that can be implemented by bystanders, community members, and first responders (Evidence Brief Point #2). Low-barrier access to take-home naloxone kits is essential to ensure opioid overdoses are reversed at the time and place in which they occur, reducing the risk of fatal overdoses and the morbidity associated with delayed response to non-fatal overdose.
- Supervised consumption sites provide a safe and monitored setting in which substances can be consumed under the supervision of an attendant trained in overdose response. Supervised consumption sites have been widely studied and demonstrated to be effective in engaging high-risk individuals who use drugs, reversing overdoses,

increasing the safety of drug use conditions, and increasing engagement in care (Evidence Brief Point #3).

- The provision of sterile inhalation and injection supplies has been demonstrated to reduce the risk of blood-borne infection transmission including HIV and Hepatitis C. Reducing unsafe drug use, including sharing or re-using injection equipment, also reduces the risk of serious injection-related infections that are associated with high rates of mortality and morbidity among people who inject drugs. The provision of free, accessible, sterile inhalation and injection supplies is an essential public health intervention to reduce adverse health outcomes among people who use drugs and the associated costs for the healthcare system (Evidence Brief Point #4).

The Greater Hamilton Health Network commits to ongoing support for our health service partners who are providing essential harm reduction services such as these to anyone using drugs within our community.

Evidence Brief Point # 1: Opioid agonist therapy

Resource: Yakovenko, Igor et al. "Management of opioid use disorder: 2024 update to the national clinical practice guideline." *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne* vol. 196,38 E1280-E1290. 11 Nov. 2024, doi:10.1503/cmaj.241173

Key Findings:

- Buprenorphine and methadone are recommended as first-line options for the treatment of opioid use disorder (strong recommendation, high certainty of evidence)
- Slow release oral morphine should be offered as a second-line option for the treatment of opioid use disorder (strong recommendation, moderate certainty of evidence)
- Opioid withdrawal management as stand-alone treatment should be avoided

Resource: Santo, Thomas Jr et al. "Association of Opioid Agonist Treatment With All-Cause Mortality and Specific Causes of Death Among People With Opioid Dependence: A Systematic Review and Meta-analysis." *JAMA psychiatry* vol. 78,9 (2021): 979-993. doi:10.1001/jamapsychiatry.2021.0976

Key Findings:

- All-cause mortality was lower (RR 0.47) while on opioid agonist therapy compared to no OAT

Resource: Larochelle MR, Bernson D, Land T, Stopka TJ, Wang N, Xuan Z, Bagley SM, Liebschutz JM, Walley AY. Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association With Mortality: A Cohort Study. Ann Intern Med. 2018 Aug 7;169(3):137-145. doi: 10.7326/M17-3107. Epub 2018 Jun 19. PMID: 29913516; PMCID: PMC6387681.

Key Findings:

- In 12-months after nonfatal opioid overdose, being prescribed OAT was associated significantly reduced all-cause mortality (↓53% for methadone, ↓37% for buprenorphine) and opioid-related mortality (↓59% for methadone, ↓39% for buprenorphine)

Resource: Pearce L A, Min J E, Piske M, Zhou H, Homayra F, Slaunwhite A et al. Opioid agonist treatment and risk of mortality during opioid overdose public health emergency: population based retrospective cohort study *BMJ* 2020; 368 :m772 doi:10.1136/bmj.m772

Key Findings:

- Relative risk of all-cause mortality off OAT was 2.1x higher than on OAT before the introduction of fentanyl

- Relative risk of all-cause mortality increased to 3.4x higher for those off OAT after the introduction of fentanyl

Evidence Brief Point # 2: Naloxone distribution

Resource: Clark AK, et al. A systematic review of community opioid overdose prevention and naloxone distribution programs. *J Addict Med* 2014; 8: 153–163.

Key Findings:

- Opioid overdose prevention program participation is associated with overdose reversals, increased knowledge and ability to respond appropriately in an overdose situation, and the ability of nonmedical bystanders to safely administer naloxone.

Resource: Katzman JG, Takeda MY, Greenberg N, et al. Association of Take-Home Naloxone and Opioid Overdose Reversals Performed by Patients in an Opioid Treatment Program. *JAMA Netw Open.* 2020;3(2):e200117. doi:10.1001/jamanetworkopen.2020.0117

Key Findings:

- Take-home naloxone as part of overdose education and naloxone distribution provided to patients in an opioid treatment program may be associated with a strategic targeted harm reduction response for reversing opioid overdose–related deaths.

Evidence Brief Point # 3: Supervised consumption services

Resource: Potier, Chloé et al. “Supervised injection services: what has been demonstrated? A systematic literature review.” Drug and alcohol dependence vol. 145 (2014): 48-68. doi:10.1016/j.drugalcdep.2014.10.012

Key Findings:

- SISs were effective in engaging the most marginalized PWID, promoting safer injection conditions, enhancing access to primary health care, and reducing overdose frequency
- SISs were not found to increase drug injecting, drug trafficking, or crime in surrounding environments

Resource: Kennedy, Mary Clare et al. “Supervised injection facility use and all-cause mortality among people who inject drugs in Vancouver, Canada: A cohort study.” *PLoS medicine* vol. 16,11 e1002964. 26 Nov. 2019, doi:10.1371/journal.pmed.1002964

Key Findings:

- Supervised injection facility use was associated with lower all-cause mortality among two prospective cohorts of PWID in Vancouver

Resource: Tsang VWL, Papamihali K, Crabtree A, et al. Acceptability of technological solutions for overdose monitoring: perspectives of people who use drugs. *Subst Abus* 2021;42:284–93.

Key Findings:

- Among 443 respondents, 48% (*n* = 212) owned a cellphone and 68% (*n* = 115) of individuals with a cellphone with access to internet (*n* = 168) would use an application to mitigate opioid-related overdose deaths.

Resource: Matskiv, George et al. "Virtual overdose monitoring services: a novel adjunctive harm reduction approach for addressing the overdose crisis." *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne* vol. 194,46 (2022): E1568-E1572. doi:10.1503/cmaj.220579

Key Findings:

- During the first 14 months of operations, the National Overdose Response System monitored 2172 substance use events; 53 adverse events required emergency response and no fatalities were reported.
- Based on emerging evidence, physicians may consider suggesting virtual overdose monitoring services as an additional option for harm reduction for people who are actively using substances and may require timely emergency support

Evidence Point # 4: Sterile injection and inhalation equipment distribution

Resource: Platt, Lucy et al. "Needle and syringe programmes and opioid substitution therapy for preventing HCV transmission among people who inject drugs: findings from a Cochrane Review and meta-analysis." *Addiction (Abingdon, England)* vol. 113,3 (2018): 545-563. doi:10.1111/add.14012

Key Findings:

- Combined OST/NSP is associated with a 74% reduction in HCV acquisition risk (RR = 0.26, 95% CI = 0.07-0.89, I2 = 80% P = 0.007)

Resource: Degenhardt L, Grebely J, Stone J, et al. Global patterns of opioid use and dependence: harms to populations, interventions, and future action. *Lancet*2019;394:1560–79

Key Findings:

- The provision of sterile injecting equipment reduces the incidence of injecting risk behaviours (adjusted odds ratio 0.52, 95% CI 0.32–0.83) and HIV (RR 0.42, 95% CI 0.22–0.81)