CLINICAL RESOURCE GUIDE FOR THE

MANAGEMENT OF ACUTE SUBSTANCE WITHDRAWAL

This guide is a component of the M-SSTEP project (McMaster's Substance Support for Teens Through Education & Partnership)

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1.0 Background Rationale & Impact

Why a substance withdrawal management plan?

Adolescent substance use and the need for initial and acute withdrawal management is a growing concern for many pediatric institutions across the province. McMaster Children's Hospital (MCH) is no exception to this trend. Youth with concerning substance use histories and associated withdrawal syndromes (from opioids, alcohol and benzodiazepines) are presenting to varied environments across MCH.

Many pediatric organizations are calling for increased capacity to care for youth through the intoxication and the acute withdrawal phases and are pushing for stronger evidence-based approaches to optimize patient and staff safety.

Why does substance withdrawal require clinical attention?

The risks associated with substance withdrawal are concerning and include; seizures, future overdoses and poisonings, lack of engagement with treatment services, discomfort, and stress. This clinical presentation requires a planned and coordinated approach, with guidance from addiction experts.

Contextually, youth are typically presenting in one of two ways; some youth present to MCH in acute and active withdrawal (crisis presentation) while others are commencing withdrawal incidentally when admitted for another condition (incidental withdrawal), be it medical or psychiatric, or a combination of both.

How is MCH responding to withdrawal needs?

After concerning clinical cases highlighting the need for collaboration, and expertise in the acute management of withdrawal, representatives from General Medicine, Psychiatry Consult Liaison, and Adolescent Medicine collaborated with the Addictions Medicine Team at St Joseph's Hospital. With financial support from our LHIN, a project was developed. The project is called M-SSTEP - McMaster's Substance Support for Teens through Education and Partnership.

The M-SSTEP Project Goals:

1 Improve clinician's ability to perform substance use assessments and identify withdrawal risk **early** in a patient's admission to hospital so that management plans are initiated at onset of admission.

2 Create a formal consultation pathway and partnership with the Addictions Medicine Team at St Joe's Hospital, improving staff education, and the provision of expert consultation in the development of safe withdrawal plans.

3 Create referral pathways to community partners who can continue MCH's initial withdrawal efforts and provide ongoing withdrawal management, and treatment provision for youth with substance use concerns.

4 Provide clinicians with education and a clinical resource guide to assist with the identification of withdrawal risk and its management.

5 Align with the principles of harm reduction, support youth and their families through acute withdrawal and share awareness of the importance of Naloxone education.

2.0 Purpose of Clinical Resource Guide:

This clinical resource guide will help clinicians:

1. Improve capacity to screen youth, early in their admission, for key features on substance use history, to assist with the identification of withdrawal risk (crisis and incidental).

2. Use evidence-based withdrawal assessment tools for the assessment of acute withdrawal symptomatology:
    - Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar)
    - Clinical Institute Withdrawal Assessment for Benzodiazepines (CIWA-B)
    - Clinical Opioid Withdrawal Scale (COWS)

3. Develop acute withdrawal management plans that include two steps or phases; foundational step (what needs to happen in the immediacy) and optimization step (the next, or secondary steps).

4. Know how to enact a consult to the Addictions Medicine Team (AMT) at St Joe's Hospital, for patient assessment and assistance with the development of acute withdrawal management.

5. Support youth and their families in the acute withdrawal phase, with the provision of pharmacological and non-pharmacological interventions and strategies.

6. Provide safe discharge planning, grounded in harm reduction that includes referrals for ongoing withdrawal needs (if the patient choses) and substance treatment services (if applicable), as well as education on the important role of Naloxone.

As this is an emerging trend among the adolescent population, research continues to evolve. Many of the following recommendations have been guided by recommendations grounded in adult care. It is important to remember that these are guidelines and do not negate your own assessment skills and clinical judgement.

3.0 Principles of Adolescent Substance Use & Withdrawal Screening

Why screen inpatients for substance use at MCH?

- The 2019 Ontario Drug Use and Health Survey found;
    - 14% high school students reported drinking hazardously/harmfully
    - 11% of students grade 7-12 reported use of prescription opioids without a prescription in the past year
    - 3% of high school students report using a sedative, such as benzodiazepines, without a prescription in the past year
- Youth substance use is common and is associated with withdrawal risks.
- An admission to general pediatrics is an opportunity to identify substance related problems and provide early intervention for the management of risks associated with withdrawal syndromes.
- Youth, unknowingly, are exposed to additionally dangerous substances including Fentanyl. The presence of Fentanyl and other substances is important when creating treatment plans.
- As of February 2021, **MCH has seen an increase in patients presenting with serious substance intoxication and acute withdrawal management needs** related to alcohol, opioids and benzodiazepines.

Why assess admitted patients for acute substance withdrawal risk?

- Abrupt stops or periods of abstinence following consistent use is associated with withdrawal. A patient's hospitalization can lead to a period of abstinence, placing them at risk of a withdrawal syndrome.
- Withdrawal can begin within hours of the last dose. Opioids, benzodiazepines and alcohol are substances associated with higher risk of withdrawal.
- **Withdrawal can be life-threatening** and can lead to serious problems for the patient including medical instability, decreased participation in care, increased risk of leaving against medical advice, and decreased engagement with treatment services.
- Important and lifesaving discharge planning measures are expected when caring for youth with substance related risks. This includes reducing overdose/poisoning risk by providing withdrawal medications and Naloxone education at discharge.

4.0 Key Principles of Acute Substance Withdrawal Management

1. An understanding of acute substance withdrawal is important.
    - Withdrawal occurs in drug-dependent people who stop or considerably reduce their drug use.
    - Withdrawal can occur in youth who have a substance use disorder as well as in youth have binged on a substance long enough to produce dependency.
    - Different substances produce different withdrawal effects, and withdrawal is not an exact science, due to a variety of reasons.
    - The state of acute withdrawal is a group of symptoms of variable clustering and severity occurring after persistent (can be as little as a few days) use of that substance.
2. The aim of acute withdrawal management is to treat the clinical features of withdrawal (some life-threatening), to prevent future overdoses due to loss of tolerance, to prevent complications, and to enable the planning of ongoing treatment after the acute withdrawal planning has been initiated.
3. Acute withdrawal management may be an opportunity to initiate lasting abstinence, but the primary goal is patient safety, not long-term abstinence.
4. Initiation of acute withdrawal management is an important first step, regardless of whether the patient will be seeking ongoing withdrawal support or substance use treatment after discharge.
5. A detailed assessment is the first step in managing the acute withdrawal process. This will provide clinical insights into the risks and the specific needs of the patient. *See STEP-A in the M-SSTEP algorithm.*
6. Medications are often first-line treatment in the management of acute withdrawal to provide symptomatic relief; to treat complications or co-existing conditions, and to reduce the intensity of withdrawal. This leads to better short and long-term outcomes for the patient.
7. Supportive, non-pharmacological care is a central feature of an acute withdrawal management plan, enhancing the patient's ability to cope.
8. Frequent observations of the patient are the mainstay of management. Assessment of clinical features, explanation, reassurance, and repeated encouragement are provided at these times.
9. Strategies for discharge should include harm reduction interventions including education about the use and provision of Naloxone kits and referrals to appropriate resources for both ongoing withdrawal management and possible substance treatment.

5.0 STEP A - Substance Screening & Withdrawal Risk Assessment

Where do I begin?

Begin with the SSHADESS assessment to capture a patient's substance use history.

For patients with no substance history, provide praise and positive reinforcement.

For patients with positive substance use on SSHADESS, consider the potential for withdrawal; either current (crisis presentation) or incidental (may go into withdrawal in the coming hours to days).

How Do I Assess for Acute Withdrawal Risk?

Follow STEP-A - Assess Acute Withdrawal Risk of the M-SSTEP Algorithm.

1. Assess risk of acute withdrawal from alcohol, opioids and benzodiazepines, by asking the following detailed questions about substance use.

S	What **substances** are being used and how are they being used (oral, snorting, smoking, or injecting)?
T	What was the **timing** of last use?
E	Have they had **experience** with overdose or withdrawal?
P	What is the **pattern** of use (i.e. daily, weekly, monthly, binge)?
A	What **amount** is being used (i.e. quantify)?

2. Assess for current withdrawal signs and symptoms from alcohol, opioids and benzodiazepines, using the following tools. These measures will assist with the identification of current withdrawal symptoms.
    - Benzodiazepines (CIWA-B)
    - Alcohol (CIWA-Ar)
    - Opioids (COWS)

These measures will assist with the identification of current withdrawal symptoms.

If there are current symptoms present – you need a withdrawal plan!

3. If STEP-A questions are positive for opioids and/or benzodiazepines, obtain a urine drug screen - UDS (UDRUGCOMP). Be sure to inform the patient about the drug screen and get consent.
    a. This is a new UDS as of March 15, 2021 and includes Fentanyl (prior to March 15, 2021 Fentanyl needed a separate test).
    b. Knowing the presence of other substances such as Fentanyl, is clinically important and can change the acute withdrawal management approach when Suboxone initiation is needed.
    c. If the rapid screen is positive, the MRP can contact the biochemist on call to have the urine sent out for further testing to identify the specific substance being used. This test is called gas chromatography mass spectrometry (GCMS).
    d. Key reminder: Clonazepam is not reliably identified on urine drug screen, if suspected refer to GCMS.

How Do I know If My Patient is At Risk of Withdrawal?

Using all the aspects in Step A of the M-SSTEP algorithm (Step A questions, withdrawal tool, UDS), you should have a sense if your patient falls into one of three categories:

1. Current symptoms of withdrawal = Crisis Presentation.
2. No current symptoms of withdrawal but possibility of future withdrawal= Incidental Withdrawal.
3. No current symptoms of withdrawal and no perceived risk for future incidental withdrawal.

If either 1 or 2, you need to develop a withdrawal plan.

6.0 STEP B – Developing an Acute Withdrawal Plan (Foundational & Optimized Planning)

1. As per STEP-B Acute Withdrawal Plan (Foundational) in the M-SSTEP algorithm, any patient in withdrawal or at risk of going into withdrawal needs a management plan developed in the immediacy as a foundational plan.

2. See this resource guide for withdrawal treatment considerations for alcohol, opioids and benzodiazepines and develop a plan of care to address the patient's current withdrawal and/or their future withdrawal needs.

3. Work as a team and collaborate with all members (i.e. nurse needs to know the patient's withdrawal status so that nursing assessments can be ongoing).

4. If Monday to Sunday (0800-1700), consult to Addiction Medicine Team (AMT) at St Joseph's Hospital through HHS paging system. This team will provide guidance on how to develop a withdrawal management strategy. The consult can either take place on the phone, or in person. See below. **Do not wait for the consult to be complete before developing a plan.**

5. Consult to Psychiatry Consult Liaison (CL) Monday to Friday 0800-1700 to assist with the management plan. **Do not wait for the CL consult to be complete before developing a plan.**

6.1 Consult Procedures for Addictions Medicine Team (AMT)

The Addictions Medicine Team (AMT) is out of St. Joseph's Hospital in Hamilton, Ontario. The physicians on this team provide consultations for admitted inpatients across HHS pertaining to substance and addiction concerns.

One of the key outcomes of the M-SSTEP project was to create a collaborative relationship with the Addictions Medicine Team so that inpatients at MCH can benefit from expert consultation. The AMT physicians have expert knowledge and skill to direct care and partner with medical services to optimize patient safety and to allow for the provision of evidence-based acute withdrawal management.

What hours do the AMT hold?

The Addiction Medicine Team is available Monday-Sunday from 0800-1700.

Will consults be in person or over the phone?

The initial consult will occur over the phone, and if time permits prior to discharge, AMT will provide an in-person consult. Alternatively, the Psych CL nurse practitioner may provide the in-person consultation and then liaise with the AMT.

What clinical information will the AMT need to provide the consult?

1. Substance use history (i.e. Answers to the STEP-A questions)
2. If in current withdrawal the score from the appropriate scale (i.e. CIWA-B, CIWA-Ar, COWS)
3. UDS results (if back), but this is not required in order to enact the consult.

What can we expect from the AMT consult?

AMT will make recommendations on the pharmacological and non-pharmacological management of acute withdrawal.

See the section below for withdrawal management strategies that AMT may recommend. These strategies are to be used in collaboration with the AMT consult recommendations.

Remember that AMT recommendations are in the context of acute withdrawal and therefore, may not be familiar to pediatric medical settings (for example, Diazepam 15-20mg TID/QID)

6.2 STEP-B - Acute Alcohol Withdrawal Management

Based on the SSHADES and the STEP-A questions, you have already established that your patient is either experiencing alcohol withdrawal, or may go into alcohol withdrawal in the coming hours to days. Either of these clinical situations requires a withdrawal management plan.

6.2.1 Implement ongoing monitoring for signs and symptoms using CIWA-Ar: Clinical Institute Withdrawal Assessment for Alcohol

CIWA-Ar Administration Tips:

- The CIWA-Ar does not diagnose withdrawal. It is a guide to the severity of an already diagnosed withdrawal syndrome.
- The CIWA-Ar scale can measure 10 symptoms. Scores <8 - 10 indicate minimal to mild withdrawal. Scores of 10 to 15 indicate moderate withdrawal (marked autonomic arousal); and scores of 15 or more indicate severe withdrawal (impending delirium tremens).
- The CIWA-Ar takes approximately 2 minutes and must be administered by staff. Self-assessment is not possible.
- CIWA-Ar can be documented as a process intervention on Meditech (N CIWA Alcohol Withdrawal)
- Be cognizant of the effects that other substance use may have on CIWA-Ar scoring (i.e., patients experiencing nicotine withdrawal may exhibit increased anxiety).

CIWA-Ar assessment tips (see Appendices for full assessment)

Symptoms Being Assessed	How to Assess	Findings/Scoring
Nausea and Vomitting	Ask: "Do you feel sick to your stomach? Have you vomited?"	**0** no nausea and no vomiting **1** mild nausea with no vomiting **4** intermittent nausea with dry heaves **7** constant nausea, frequent dry heaves and vomiting
Tremor	Observe patient with arms extended and fingers spread apart.	**Mild tremor (1-2):** fine fluid-like movements, **Moderate tremor (3-4):** noticeable tremor to the hand i.e., if a cup was in the hand **Severe tremor (5-6):** requires 2 hands to bring a cup to mouth, **Full-body tremor (7):** patient cannot stand an assisted and has tremors all over including the tongue
Paroxysmal sweats		**Mild sweat (1-2):** mild moisture present to palms, back of the neck or forehead **Moderate sweat (3-4):** sweat on the forehead and the palms with clothing damp **Severe sweat (6-7):** clothing and bedding wet OR patient is wet and clammy **Drenching (7):** clothing and bedding are soaked

Chart continued on page 14.

Symptoms Being Assessed	How to Assess	Findings/Scoring
Agitation		**Subjective:** patient describing feeling unable to keep still **Objective:** observed restlessness, tossing and turning, pacing
Tactile Disturbances	Ask: "Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling on or under your skin"	Initially described as itching Progresses to numbness and tingling **Severe symptoms:** feeling things crawling on skin
Auditory Hallucination	Ask: "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?"	**Mild to moderate:** increased sensitivity to noise **Severe:** auditory hallucinations
Visual Hallucination	Ask: "Does this light appear to be too bright? Is its color different? Do they hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?"	**Mild to moderate:** increased sensitivity to light **Severe:** responding to visual hallucinations (including seeing shadows)

6.2.2 Anticipate progression of withdrawal symptoms

- Withdrawal may develop after 2-week period of heavy consumption followed by abrupt cessation (4-6 drinks/day)
- Majority of people will experience mild to moderate withdrawal symptoms that may resolve quickly. However, some may experience severe withdrawal including delirium tremens or seizures.

Time Since Last Drink	Stage of Withdrawal	Signs, symptoms & progression
Typically, 6-12 hours	1 - Mild withdrawal	• Tremors • Insomnia • Irritability • Mild agitation • Nausea/vomiting • Anorexia • Tension • Anxiety • Sweating • Restlessness • Resolves within 24-48 hours if withdrawal does not progress or is treated
Typically, 12-24 hours	2- Hallucinations	• Hallucinations (auditory, visual, or tactile) may occur • Resolves within 48 hours if withdrawal does not progress or is treated
24-48 hours (can occur much earlier)	3- Seizures	• Usually tonic-clonic seizures that generally occurs once or a few times then resolves
3-7 days	4 - Withdrawal delirium	• Hallucinations (usually visual) • Disorientation • Tachycardia • Agitation • Diaphoresis • Low-grade fever • Hypertension

6.2.3 Monitor Vital Signs

- Complete with each CIWA-Ar assessment, minimum frequency of q4h but can increased frequency to q1h for severe withdrawal
- With change in HPEWS score, notify MRP.

6.2.4 Treat Acute Withdrawal Syndrome

Diazepam treatment should be initiated early in the course of alcohol withdrawal, to prevent progression to more severe withdrawal (i.e. seizures). The three most commonly used approaches are:

- Symptom-triggered support, where doses of diazepam are administered according to the severity of withdrawal symptoms (often most recommended with crises presentation)
- Diazepam loading, which involves giving a large dose on day 1, then no further diazepam (recommended for inpatient withdrawal)
- Tapering dose regimens, where a predetermined dose of diazepam is administered in tapering doses over 2–6 days (recommended for outpatient withdrawal)

Benzodiazepine side effects include drowsiness, dizziness, nausea, headaches and blurred vision

Contraindications to benzodiazepine use include respiratory insufficiency, hepatic disease, sleep apnea, myasthenia gravis and narrow angle glaucoma

Other possible medications that may be recommended by AMT:

- Carbamazepine
- Gabapentin
- Clonidine

Note that the evidence is not as robust for using these medications for alcohol withdrawal and should be prescribed by those familiar with the medications and under special circumstances.

6.2.5 Treat Associated Withdrawal Symptoms to Optimize Comfort

** Refer to the MacPeds Pediatric Formulary for Dosing Guidelines**

Nausea and Vomiting

- Diphenhydramine
- Ondansetron

Diarrhea

- Loperamide

Headaches

- Acetaminophen
- Ibuprofen

Nutritional Support

- Thiamine
- Comprehensive multivitamin

6.2.6 Consider additional assessment and monitoring needs

- Polysubstance use and increased need for respiratory monitoring (i.e. Benzodiazepine ingestion).
- Hydration and nutritional status can be affected. Monitor and respond as needed.
- Consider the added value of additional bloodwork testing for Beta HCG, alcohol, ASA and Acetaminophen levels

6.2.7 Consult Addictions Medicine Team

- see section 6.1 Consult Procedures for Addictions Medicine Team (AMT) for details

For further non-pharmacological interventions, see STEP-C

6.3 STEP B – Acute Benzodiazepine Withdrawal Management

Based on the SSHADES and the STEP-A questions, you have already established that your patient is either experiencing benzodiazepine withdrawal, or may go into benzodiazepine withdrawal in the coming hours to days. Either of these clinical situations requires a withdrawal management plan.

6.3.1 Implement ongoing monitoring for signs and symptoms using CIWA-B: Clinical Institute Withdrawal Assessment for Benzodiazepines

Important considerations about the CIWA-B:

- CIWA-B offers a systematic measure of the severity of withdrawal. It is not a diagnostic tool, but will guide clinical thinking about the severity of the withdrawal syndrome.
- Perform CIWA-B q4h unless patient is in severe withdrawal OR has history of complicated withdrawal then perform assessment q2h. To promote sleep, consider only performing CIWA-B while awake.
- Meditech does not have a process intervention for CIWA-B documentation. A paper copy can be used. (see Appendices for full assessment/print out)
- Take patients word for symptom reporting – try to stay away from thinking patients are “drug-seeking”, especially within the first 24 hours

6.3.2 Anticipate Progression of Withdrawal Symptoms

- Symptoms of benzodiazepine withdrawal are similar to alcohol withdrawal
- Predicting the severity of a patient’s withdrawal experience is challenging and relates to their pattern of use. Withdrawal is associated after discontinuation of regular, daily use and can be experienced in patients who’s use history is as little as 4 weeks.
- Risk of withdrawal is greatest if the patient has abruptly stopped a high daily dose of a short-acting agent
- Benzodiazepines should not be stopped abruptely – tapering regime is recommended.

Elimination Half-Life	Onset/Latency	Peak of Withdrawal	Duration from start of withdrawal symptoms
Short-Acting (Midazolam(Versed), Triasolam(Halcion))	Within 24 hours	1-14 days (usually earlier)	7-21 days
Moderate/Longer-Acting Alprazolam(Xanax),Diazepam (Valium), Lorazepam(Ativan), Clonazepam (Rivotril)	2-7 days (usually within 5 days)	1-20 days (usually later)	10-28 days

Withdrawal timeline is based on withdrawal pharmaceutical grade benzodiazepines ingested PO. Withdrawal onset can be significantly quicker when ingested by a more direct route such as snorting, smoking or injecting.

6.3.3 Monitor Vital Signs

Vital signs:

- Regular monitoring q3-4hours
- With change in HPEWS score/color, notify MRP.

Supervised withdrawal is recommended if:

- History of high/prolonged use
- History of seizures associated with withdrawal
- Withdrawal is severe and not able to be managed on the max dose of 50mg of diazepam daily

6.3.4 Treat Acute Withdrawal Syndrome Using Benzodiazepines

- If patient presents in a crisis presentation DO NOT WAIT. Consider ordering PRN doses for breakthrough cravings, as this is often required.
- As per AMT, if a patient presents with agitation/hallucinations/hyperactivity, initial treatment should be benzodiazepines and not antipsychotics (lowers seizure threshold)
- Consider dosing through the night in cases where withdrawal symptoms remain present

Possible benzodiazepines that may be recommended by AMT could include;

Clonazepam (typically used if patients drug of choice is Diazepam)

- Clonazepam can lower abuse potential and is less likely to cause prolonged sedation

Lorazepam (if patient appears to go into severe withdrawal)

Diazepam (it is not uncommon for patients to require high doses in ranges that include 100-200mg/day within the first 24 hours of withdrawal)

- Diazepam can be dose as TID or QID with PRN options for breakthrough symtpoms

6.3.5 Treat Associated Withdrawal Symptoms to Optimize Comfort

** Refer to the MacPeds Pediatric Formulary for Dosing Guidelines**

Nausea and Vomiting

- Ondansetron

Headaches

- Acetaminophen
- Ibuprofen

6.3.6 Consider additional assessment and monitoring needs

- Hydration and nutritional status can be affected. Monitor and respond as needed.
- Consider the added value of additional bloodwork testing for Beta HCG, alcohol, ASA and Acetaminophen levels.

6.3.7 Consult Addictions Medicine

- see section 6.1 Consult Procedures for Addictions Medicine Team (AMT) for details

For further non-pharmacological interventions, see STEP-C

6.4 STEP B – Acute Opioid Withdrawal Management

Based on the SSHADES and the STEP-A questions, you have already established that your patient is either experiencing opioid withdrawal, or may go into opioid withdrawal in the coming hours to days. Either of these clinical situations requires a withdrawal management plan.

6.4.1 Implement ongoing monitoring for signs and symptoms using COWS: Clinical Opioid Withdrawal Scale

CIWA Administration Tips:

- The COWS does not diagnose withdrawal. It is a guide to the severity of an already diagnosed withdrawal syndrome.
- The COWS scale measures 11 symptoms. Scores of < 5 – 12 indicate minimal to mild withdrawal; scores of 13 – 24 indicate moderate withdrawal; scores of 25 - 36 indicates moderate to severe withdrawal; and scores of 37 or more indicate severe withdrawal.
- The COWS assessment takes 2-10 minutes to complete, including observation and scoring.
- Complete COWS q 4-6 hrs (QID) x 2-3 days unless Suboxone has been initiated.
- If started on suboxone, repeat COWS 1 hour after the first dose to assess for precipitated withdrawal (see page 24) then follow q 2 hrs until COWS < 5 on two consecutive occasions.

Symptoms Being Assessed	How To Assess	Findings/Scoring
Resting Pulse Rate:		• Recorded after the patient has been sitting or lying for 1 minute
Sweating	Preceding 30min and not related to room temp/ activity	• Over the past 1/2 hour • Observation and patient report
Restlessness		• If sitting still without obvious restlessness, ask "are you having difficulty sitting still?" • Range from subjective report to clear observation of frequent movement
Pupil Size		• Observed in room light • Turn on the lights in the room for assessment and allow for adjustment
Bone or Joint Aches	Not including existing joint pains	• Make a baseline assessment of pain (i.e does the patient have any chronic pain issues) • The assessment is based only on additional pain, outside of their baseline
Runny Nose or Tearing	Not related to URTI or allergies	• Range in severity from patient report to observation • Often observed "sniffling"
GI Upset		• Over the last 30 minutes • Ask patients to show staff when they have episodes of diarrhea or vomiting
Tremor	Observe outstretched hands	• Put your patients' hands on top of yours to be able to feel fine tremor
Yawning		• Scored based on the frequency of yawning during observation
Anxiety or Irritability		• Combination of self-report and observation
Gooseflesh Skin		• Ask patient to hold out arm, run fingers on arm to feel piloerection

6.4.2 Anticipate progression of withdrawal symptoms

- Symptoms of opioid withdrawal can be severe but are not usually life-threatening.
- Onset and duration of peak withdrawal symptoms after abrupt cessation varies by drug involved
- Symptoms may begin 6-12 hours after the last dose, peaks at 48-72 hours, and subsides after 7-10 days
- Severity of withdrawal is determined by numerous factors: dosage, chronicity, route, extent of use, and extent of drug related medical and psychiatric complications

Acute Phase of Withdrawal	• Moderate-to-severe flu-like symptoms (rhinorrhea, flushing, chills) • Increase in pain or abnormally heightened sensitivity to pain • Muscle spasm/twitching • Restlessness or restless legs (particularly when lying down) • Abdominal cramps • Insomnia • Diarrhea • Nausea • Vomiting • Myalgias, arthralgias • Lacrimation • Piloerection • Yawning • Sneezing • Anorexia
Protracted Phase of Withdrawal – may last several weeks/months	• Pain • Anxiety • Intolerance to stress • Irritability

6.4.3 Monitor Vital Signs

- Vital signs can be performed q2-4h depending on severity of withdrawal, COWS to be completed with vital signs
- With change in HPEWS score/color, notify MRP.

6.4.4 Initiation of Pharmacological Treatment of Acute Withdrawal Syndrome

- The goal of pharmacological initiation is two-fold: (1) to treat the uncomfortable symptoms of opioid withdrawal and (2) to support maintenance of opioid tolerance. Losing tolerance after a short period of abstinence is associated with increased risk of future poisoning (overdose). A short period would include a stay in an ER, or on an inpatient unit.
- Short-acting opioids and Suboxone can be used for the management of withdrawal symptoms and cravings and to support maintenance of opioid tolerance. E.g. order: 30mg morphine PO q3h with 30mg morphine PO q2h PRN (total of 60mg q3h)

Suboxone is common and is considered first-line treatment for opioid withdrawal. The referral to AMT may suggest using Suboxone as follows:

- Buprenorphine/Naloxone 2mg/0.5mg SL (Suboxone) supports the treatment of withdrawal symptoms AND to support tolerance.

Suboxone Administration Tips:

Suboxone MUST be given sublingually. All doses must be witnessed. It can take up to ten minutes to dissolve under the tongue – this is not a quick dissolve tablet.

- If COWS score is 13 or >, give Buprenorphine/Naloxone 2mg/0.5mg SL q2h. No more than 16mg is to be given in first 24 hours.
- Repeat COWS 1 hour after first dose. If symptoms have worsened, precipitated withdrawal is likely. Notify MD is precipitated withdrawal occurs.

Available order sets:

*Consult AMT **prior** to ordering*

Suboxone Initiation: https://txconnect.patientordersets.com/_scripts/docfetch.php?id_stored_document=192125&doc_type=os

Micro-Dosing: https://txconnect.patientordersets.com/_scripts/docfetch.php?id_stored_document=192387&doc_type=os

If after first dose of buprenorphine/naloxone the COWS score is increased from COWS score prior to first dose, buprenorphine component may have precipitated opioid withdrawal. If patient in precipitated withdrawal, additional doses of buprenorphine/naloxone or other opioids may worsen symptoms. Treatment of precipitated withdrawal is targeted to symptom control. Contact the Addiction Medicine Service for assistance.

Medications to Avoid:

- Benzodiazepines: puts the patient at higher risk for respiratory depression
- Clonidine: can falsely lower the patient's opioid requirements

6.4.5 Treat Associated Withdrawal Symptoms to Optimize Comfort

Nausea and Vomiting

- Ondansetron
- AVOID: Diphenhydramine/Dimenhydrinate – sedative effects

Diarrhea

- Loperamide

Aches/Pains

- Ibuprofen
- Acetaminophen

Overdose

- Naloxone

Refer to the MacPeds Pediatric Formulary for dosing guidelines of above suggestions.

6.4.6 Consider additional assessment and monitoring needs

- Hydration and nutritional status can be affected. Monitor and respond as needed.
- Consider the added value of additional bloodwork testing for Beta HCG, alcohol, ASA and Acetaminophen levels

6.4.7 Consult Addictions Medicine

- see section 6.1 Consult Procedures for Addictions Medicine Team (AMT) for details

For further non-pharmacological interventions, see STEP-C

7.0 STEP C – Optimization of Withdrawal Plan

While management of each substance can be different, the supportive care measures can be the same throughout.

Non-Pharmacological Considerations

Reduce Environmental Stimuli

- Withdrawal syndromes can elevate the senses and can contribute to discomfort. This can lead to increased anxiety and agitation. A quiet and calm environment with reduced lighting can be beneficial. Consider prioritizing a private room for patients in withdrawal.

Education on what to expect:

- Be open and transparent with the patient about what they are feeling. Knowing what to expect can can alleviate anxiety and fear that are common in withdrawal syndromes. Valditating the patient and helping them understand what is happening, can lead to a more positive experience, and can also help them engage in the necessary follow up services.

Comfort Care:

- Things such as showers and warm blankets can help ease the physiological effects of withdrawal.

Nutritional and hydration monitoring and education:

- Many youth are at risk of malnutrition related to their use. Patients experiencing vomiting and diarrhea are also more susceptible to dehydration. Provide education about the importance of good nutrition and hydration in healing. Monitor the youth's intake and consider nutritional supplements if necessary. (i.e., Thiamine, Multivitamins).
- Pts should be allowed to sleep or rest if they wish or to engage in moderate activities such as walking

Sleep Hygiene:

- Sleep disturbance is extremely common in adolescents going through withdrawal. It is important to provide the opportunity to develop effective sleeping strategies. Common strategies:
  - › Provide patient with a private room for minimal disturbances/low stimuli
  - › Encourage a regular bedtime routine and regular sleep/wake schedule
  - › Avoid ingesting caffeine or carbonated drinks
  - › Encourage physical activity during the day
  - › Avoid TV/videos/computers before bed

- Sleep disturbance usually involves the initiation, maintenance, or quality of sleep; to assess the following questions may be helpful:
  - Do you have problems going to sleep? – initiating sleep
  - Do you have problems staying asleep? – maintaining sleep
  - Do you feel refreshed when you wake up? – quality of sleep
- Medications to induce sleep should be the exception as they typically delay the return to normal sleep patterns and have the potential for abuse.

Promotion of Physical Activity:

- Encouraging physical activity during appropriate hours will help the patient return to a normal sleep pattern more easily.

Brief Interventions:

- This is a time, usually post screening, when you can provide simple education or praise for good choices. I.e., "I am really happy to hear that you have reduced your intake of marijuana

Involve family in care:

- Family can provide support to the patient at the bedside and act as their advocate. It also provides staff an opportunity to provide health teaching to family members (ex. Naloxone kits). In addition, adolescents may be dependent on family for follow through with outpatient supports. Clinicians need to be particularly cognizant of confidentiality when including the family.

Child Life Specialists:

- They are a good resource for providing calming and distraction techniques to those youths who may be struggling. They can also provide support in creating a plan for sleep hygiene by creating a daily schedule.

Managing Difficult Behaviors

Anxious/Panicked

- Approach in a calm and confident manner
- Minimize the number of people responding to patient to only who is essential to keep everyone safe
- Validate concerns
- Explain any interventions and what to expect
- Minimize risk of self-harm

Confused/Disoriented

- Maintain frequent supervision
- Provide regular prompts to reorient patient (i.e. where they are, when it is, what's happening)

Experiencing hallucinations

- Talk to patient to understand what they are experiencing
- Validate experience
- Explain what is real and isn't real
- Ensure environment is simple and uncluttered
- Ensure patient, staff and co-patients safety

Angry/Aggressive

- Ensure patient, staff and co-patients safety
- Remain calm and reassuring during interactions (even if patient becomes hostile and raises voice)
- Listen to the patient's concerns
- Validate feelings and concerns
- Use open ended questions
- Don't be challenging
- Use person's name to personalize the interaction

Consult Services

Consult to Addictions Medicine:

- Addictions Medicine is based out of St. Joseph's Hospital and has a consult service available to us. These are the experts in withdrawal management and can provide recommendations on care. They are available Monday to Sunday 0800 – 1700.

Consult to Social Worker:

- Social workers have extended skills to provide support for patients and families. Although not directly involved in the provision of withdrawal management, being a supportive member of the team, who can build a rapport with the patient, will be helpful. Social workers can also assist with community resources while in the hospital and upon discharge.

Consult to Contact Liaison:

- The CL service can support the team in the development of a withdrawal management plan, can assess the patient for the presence of co-existing mental health conditions and develop treatment plans for such and support the team in the management of the patient.

8.0 STEP D – Discharge Treatment Planning

Referral to Continuing Care

- Adolescents with substance related conditions who are interested in support should be connected with outpatient services as part of their care plan. Youth who are connected have lower rates of substance use, lower levels of depression and are less likely to attempt suicide.

Pharmacotherapy

- Rapid Access Addictions Medicine Clinic (RAAM)
- Only certain patients will fit the criteria for rapid follow up (ex. Suboxone tapering). Addiction's medicine will help guide this decision. The appointment should be in place prior to patient leaving the hospital.

Psychosocial support

- Hamilton - Alternatives for Youth (AY)
- Niagara – Community Addiction Services of Niagara (CASON)
- Brantford – St. Leonard's Community Services
- Halton – ADAPT
- Haldimand-Norfolk – Community Addiction and Mental Health Services (CAMHS)

Inpatient/residential

- CAMH Concurrent Youth Unit (Located in Toronto)
- Portage (Located in Elora)
- Dave Smith (Located in Ottawa)

Harm Reduction Education

- The aim is to keep people safe and to minimize death, disease and injury from high-risk behavior. It is important to recognize that abstinence may not be a realistic or desirable goal, and respects that patients may choose to use drugs. Special consideration for youth because of their vulnerability.

  Examples include:

  - Follow lower-risk guidelines (ex. alcohol and cannabis use)
  - Don't mix substances
  - Use in a safe environment and never alone
  - Don't operate a vehicle while under the influence
  - Choose the least harmful method of use (oral is safer than injecting)
  - IV drug users should be offered education on decreasing risk of acquiring blood borne illnesses such as HIV, HEP B and HEP C (i.e., using new needles)
  - Testing drugs before use (either having it tested or trying a small sample first to evaluate potency)
  - Take home naloxone kits: provide youth with education around use and how to obtain repeat kids if needed.

9.0 Bibliography of Additional Resources

Courses:

University of British Columbia, Continuing Professional Development. Addiction Care and Treatment Online Course. Vancouver, BC: University of British Columbia; 2017. Available from: https://ubccpd.ca/course/addiction-care-and-treatment

Guidelines:

DynaMed [Internet]. Ipswich (MA): EBSCO Information Services. 1995 -. Record No. T114807, Alcohol Withdrawal Syndrome; [updated 2018 Nov 30]. Available from https://www.dynamed.com/topics/dmp~AN~T114807. Registration and login required.

DynaMed [Internet]. Ipswich (MA): EBSCO Information Services. 1995 - . Record No. T115893, Opioid Withdrawal; [updated 2018 Nov 30]. Available from https://www.dynamed.com/topics/dmp~AN~T115893. Registration and login required.

DynaMed [Internet]. Ipswich (MA): EBSCO Information Services. 1995 - . Record No. T114931, Benzodiazepine Withdrawal Syndrome; [updated 2018 Nov 30]. Available from https://www.dynamed.com/topics/dmp~AN~T114931. Registration and login required.

Government of Nova Scotia Adolescent Withdrawal Management Working Group. Adolescent Withdrawal Management Guidelines 2013. Available from https://novascotia.ca/dhw/addictions/ documents/Adolescent-Withdrawal-Management-Guidelines.pdf

META:PHI group. (2019) Clinical Best Practice in Addictions Medicine: A Guide for RAAM clinicians. Toronto, ON: Women's College Hospital; Available from http://www.metaphi.ca/assets/documents /provider%20tools/ RAAM_BestPractices.pdf

NSW Department of Health (2008, reviewed 2018) Drug and Alcohol Withdrawal Clinical Practice Guidelines – NSW. Available from https://www1.health.nsw.gov.au/pds/ActivePDSDocuments /GL2008_011.pdf

Registered Nurses' Association of Ontario. (2015). Engaging Clients Who Use Substances. Toronto, ON: Registered Nurses' Association of Ontario. Available from https://rnao.ca/sites/rnaoca/files/ Engaging_Clients_Who_Use_Substances_13_WEB.pdf

World Health Organization. (2009) Clinical guidelines for withdrawal management and treatment of drug dependence in closed settings. Available from https://apps.who.int/iris/handle/10665/207032

Relevant HHS policies and order sets:

HHSC Order set library – Alcohol Withdrawal Management Order Set

HHSC Order set library – Acute Opioid Withdrawal Management (in development)

HHSC Policy library - PHARM - Naloxone Take Home Kits: Procurement, Education and Dispensing - Adult and Pediatric

HHSC Policy library - PHARM – Buprenorphine Oral [Suboxone® (includes naloxone) , Subutex®] Prescribing, Dispensing and Administering Protocol

HHSC Policy library - MAC – Alcohol Withdrawal, Assessment and Management Protocol – Background and Form (outdated though clinically relevant)

HHSC Policy library – (Suboxone®) Treatment for Acute Opioid Withdrawal (AOW) Medication record

HHSC Policy library – Assessment for the management of opioid withdrawal: Clinical Opiate Withdrawal Scale (COWS)

Statistics:

Boak, A., Elton-Marshall, T., Mann, R. E., & Hamilton, H. A. (2020). Drug use among Ontario students, 1977-2019: Detailed findings from the Ontario Student Drug Use and Health Survey (OSDUHS). Toronto, ON: Centre for Addiction and Mental Health.

Websites:

British Columbia Centre on Substance Use - https://www.bccsu.ca/

Canadian Research Initiative in Substance Misuse - https://crism.ca/

Mentoring, Education, and Clinical Tools for Addiction: Primary Care – Hospital Integration (META:PHI) - https://www.metaphi.ca/

10.0 Appendices

Clinical Institute Withdrawal Assessment for Alcohol, revised (CIWA-Ar)

NAUSEA AND VOMITING Ask "Do you feel sick to your stomach? Have you vomited?" Observation 0 no nausea and no vomiting 1 2 3 4 intermittent nausea with dry heaves 5 6 7 constant nausea, frequent dry heaves & vomiting	AGITATION Observation 0 normal activity 1 somewhat more than normal activity 2 3 4 moderately fidgety and restless 5 6 7 paces back and forth during most of the interview, or constantly thrashes about
TREMOR Arms extended and fingers spread apart Observation 0 no tremor 1 not visible, but can be felt fingertip to fingertip 2 3 4 moderate, with patient's arms extended 5 6 7 severe, even with arms not extended	TACTILE DISTURBANCES Ask "Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling on your skin?" Observation 0 none 1 very mild itching, pins and needles, burning or numbness 2 mild itching, pins and needles, burning or numbness 3 moderate itching, pins and needles, burning or numbness 4 moderately severe hallucinations 5 severe hallucinations 6 extremely severe hallucinations 7 continuous hallucinations
PAROXYSMAL SWEATS Observation 0 no sweat visible 1 barely perceptible sweating, palms moist 2 3 4 beads of sweat obvious on forehead 5 6 7 drenching sweats	AUDITORY DISTURBANCES Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?" Observation 0 not present 1 very mild harshness or ability to frighten 2 mild harshness or ability to frighten 3 moderate harshness or ability to frighten 4 moderately severe hallucinations 5 severe hallucinations 6 extremely severe hallucinations 7 continuous hallucinations
ANXIETY Ask "Do you feel nervous?" Observation 0 no anxiety, at ease 1 mildly anxious 2 3 4 moderately anxious, or guarded, so anxiety is inferred 5 6 7 equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions	VISUAL DISTURBANCES Ask "Does the light appear to be too bright? Is its colour different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?" Observation 0 not present 1 very mild sensitivity 2 mild sensitivity 3 moderate sensitivity 4 moderately severe sensitivity 5 severe hallucinations 6 extremely severe hallucinations 7 continuous hallucinations
HEADACHE, FULLNESS IN HEAD Ask "Does your head feel different? Does it feel like there is a band around your head?" Do not rate for dizziness or light-headedness. Otherwise, rate severity. Observation 0 not present 1 very mild 2 mild 3 moderate 4 moderately severe 5 severe 6 very severe 7 extremely severe	ORIENTATION AND CLOUDING OF SENSORIUM Ask "What day is this? Where are you? Who am I?" Observation 0 oriented and can do serial additions 1 cannot do serial additions or is uncertain about date 2 disoriented for date by no more than 2 calendar days 3 disoriented for date by more than 2 calendar days 4 disoriented for place and/or person
0-9 absent/very mild 10-15 mild 16-20 moderate 21-67 severe CIWA-Ar Score _____	

Clinical Institute Withdrawal Assessment for Benzodiazepines (CIWA-B)

Objective physiological assessment For each of the following items, circle the number which best describes the severity of each sign or symptom						
1	Observe behavior for restlessness and agitation	0 none, normal activity	1	2 restless	3	4 Paces back & forth, unable to sit still
2	Ask patient to extend arms with fingers apart, observe tremor	0 no tremor	1 not visible, can be felt in fingers	2 visible but mild	3 moderate, with arms extended	4 severe, with arms not extended
3	Observe for sweating, feel palms	0 No sweating visible	1 Barely perceptible sweating, palms moist	2 Palms and forehead moist, reports armpit sweating	3 Beads of sweat on forehead	4 Severe drenching sweats
Patient Self-Report For each of the following items, please circle the number which best describes how you feel.						
4	Do you feel irritable?	0 not at all	1	2	3	4 very much so
5	Do you feel tired?	0 not at all	1	2	3	4 unable to function due to fatigue
6	Do you feel tense?	0 not at all	1	2	3	4 very much so
7	Do you have difficulties concentrating?	0 no difficulty	1	2	3	4 unable to concen-trate
8	Do you have loss of appetite?	0 no loss	1	2	3	4 no appetite, unable to eat
9	Have you any numbness or burning in your face, hands or feet?	0 none	1	2	3	4 intense numbness or burning
10	Do you feel your heart racing?	0 none	1	2	3	4 constant racing
11	Does your head feel full or achy?	0 not at all	1	2	3	4 severe headache
12	Do you feel muscle aches or stiffness?	0 not at all	1	2	3	4 severe stiffness or pain
13	Do you feel anxious, nervous or jittery?	0 not at all	1	2	3	4 very much so
14	Do you feel upset?	0 not at all	1	2	3	4 very much so
15	How restful was your sleep last night?	0 very restful	1	2	3	4 not at all
16	Do you feel weak?	0 not at all	1	2	3	4 very much so
17	Do you think you had enough sleep last night?	0 Yes, very much so	1	2	3	4 not at all
18	Do you have any visual disturbances (sensitivity to light, blurred vision?	0 not at all	1	2	3	4 very sensitive to light, blurred vision.
19	Are you fearful?	0 not at all	1	2	3	4 very much so
20	Have you been worrying about possible misfortunates lately?	0 not at all	1	2	3	4 very much so
21	How many hours of sleep do you think you had last night?			TOTAL CIWA-B Score:		
22	How many minutes do you think it took you to fall asleep last night?					

Accessed from: https://insight.qld.edu.au/file/410/download

Clinical Opioid Withdrawal Scale (COWS)

Resting Heart Rate (measure after lying or sitting for 1 minute): 0 HR 80 or below 1 HR 81-100 2 HR 101-120 4 HR greater than 120
Sweating (preceding 30 minutes and not related to room temp /activity): 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face
Restlessness (observe during assessment): 0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 unable to sit still for more than a few seconds
Pupil size: 0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible
Bone or Joint aches (not including existing joint pains): 0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/ muscles 4 patient is rubbing joints / muscles plus unable to sit still due to discomfort
Runny nose or Tearing (not related to URTI or allergies): 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks
GI Upset (over last 30 minutes): 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 multiple episodes of vomiting or diarrhea
Tremor (observe outstretched hands): 0 no tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching
Yawning (observe during assessment): 0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute
Anxiety or Irritability 0 none 1 patient reports increasing irritability or anxiousness 2 patient obviously irritable or anxious 4 Patient so irritable or anxious that participation in the assessment is difficult
Gooseflesh skin 0 skin is smooth 3 piloerection (goosebumps) of skin can be felt or hairs standing up on arms 5 prominent piloerection
SCORE INTERPRETATION: 5-12 = MILD 13-24 = MODERATE 25-36 = MODERATELY SEVERE > 36 = SEVERE WITHDRAWAL

Glossary of Slang Terms for Substances

Slang terms for different substances have many origins. They can be an abbreviation or reflect the substances colour, shape, place of origin etc. The terms being used as part of the common lexicon are variable between regions and can change rapidly. The following list is a glossary of common slang terms with the highlighted terms being those that Police in Ontario are commonly hearing at this time.

BENZODIAZEPINES		
Benzodiazepines (general)		Bars, Benzos, Blues, Chill Pills, Downers, Nerve Pills, Planks, Tranks, Zannies
lorazepam	Ativan	Candy, Downers, Sleeping Pills, Tranks
triazolam	Triazo	Candy, Downers, Sleeping Pills, Tranks
clonazepam	Klonopin	K, K-Pin, Pin, Super Valium
chlordiazepoxide	Librium	Candy, Downers, Sleeping Pills, Tranks
flunitrazepam	Rohypnol	Circles, Date Rape Drug, Forget-Me Pill, La Rocha, Lunch Money, Mexican Valium, Mind Eraser, Roofies, Wolfies
diazepam	Valium	Eggs, Jellies, Moggies, Vallies
alprazolam	Xanax	Bars, Bicycle Handle Bars, Footballs, French Fries, Hulk, Ladders, School Bus, Xan, Xanies, Zan, Zannies, Zanbars, Z-Bars
OPIOIDS		
Buprenorphine	Suboxone	Big Whites, Buse, Oranges, Small Whites, Sobos, Stops, Strips, Sub, Subs
Codeine		Captain Cody, Cody, Little C, Schoolboy
Codeine with Promethazine		Act, Lean, Purple Drank, Sizzurp, Texas Tea
Fentanyl	Actiq, Sublimaze	Apache, China Girl, China White, Dance Fever, Fenny, Fetty, Friend, Goodfella, Jackpot, Murder 8, Point (referring to unit of purchase), Tango and Cash, TNT, 8ball (referring to unit of purchase)

Hydrocodone	Hycodan, Lortab, Norco, Vicodin	Bananas, Dro, Fluff, Hydros, Tabs, Vikes, V-itamin, Watson-387, 357s
Hydromorphone	Dilaudid	D, Dillies, Footballs, Juice, Smack
Meperidine	Demerol	Demmies, Pain Killer
Methadone	Metadol, Dolophine, Methadose	Amidone, Dollies, Dolls, Fizzies, Mud, Red Rock, Tootsie Roll
Morphine	M.O.S., MS Contin, MSIR	God's Drug, M, Miss Emma, Monkey, Morpho, White Stuff
Oxycodone	OxyContin	30s, As, Berries, Blues, Blueberries, Hillbilly Heroin, Ms, O.C., Oxy, Oxycet, Oxycotton, Ozone, Roxy
	Percocet	Ercs, Greenies, Kickers, M-30s, Percs, Rims, Tires, Wheels, 512s
Oxymorphone	Opana	Biscuits, Blue Heaven, Mrs. O, O Bomb, Octagons, Stop Signs
Propoxyphene	Darvon	Footballs, N's, Pink Footballs, Pinks, Yellow Footballs, 65s
Tramadol	Ultram, Zytram	Chill Pills, Trammies, Ultras
Black Tar Heroin		Chiva, Mexican Black Tar Heroin, Mexican Tar
Heroin		Black, Black Tar, Black Pearl, Black Stuff, Black Eagle, Boy, Brown, Brown Crystal, Brown Rhine, Brown Sugar, Brown Tape, China White, Dope, Dope, Dragon, The Dragon, H, He, Horse, Junk, Mexican Brown, Mexican Mud, Mexican Horse, Mud, Number 3, Number 4, Number 8, Sack, Scat, Skag, Skunk, Smack, Snow, Snowball, Tar, White, White Nurse, White Lady, White Horse, White Girl, White Boy, White Stuff

Cocaine with Heroin	Speedball

Reference:
Addictionscentre.com. Drug Street Names. Updated: March 3, 2021. Accessed March 8, 2021. https://www.addictioncenter.com/drugs/drug-street-names/