Acknowledgments

The Midwest Consortium for Hazardous Waste Worker Training adapted this program from work created by ERS International for private industry under cooperative agreement number U45 ES 06184 from the National Institute of Environmental Health Sciences (NIEHS), as well as programming created by NIEHS.

See https://mwc.umn.edu for a listing of contacts at each member institution and additional information. We encourage you to comment on these materials.

Warning

The Midwest Consortium has copyrighted this material. A recipient of the material, other than the Federal Government, may not reproduce it without permission of the copyright owner. The material was prepared for use by facilitators experienced in the training of persons who are or who anticipate responding to emergencies. Authors of this material have prepared it for the training of this category of workers as of the date specified on the title page. Users are cautioned that the subject is constantly evolving. Therefore, the material may require additions, deletions, or modifications to incorporate the effects of that evolution occurring after the date of this material preparation.

Disclaimer

The Occupational Safety and Health Administration (OSHA) regulation to help assure worker health and safety during emergency response activities requires specific training and other health and safety measures depending upon the duties to be performed. Knowledge about the requirements for each of these employment sectors enables an assessment of compliance. This awareness program does not replace training required by OSHA standards.

This program was updated September 1, 2023; all web links are active as of that date. If you find an error, please inform the facilitator so that it can be updated.
The Midwest Consortium developed this course to train emergency responders and others who may respond to an opioid overdose. By following the outlined format and activities in this guide, you will be better able to enhance learning, stimulate participant discussion, and achieve the training objectives.

It is expected that 2 hours are needed for the program. Breaks are not part of the training hours.

It is the responsibility of the training center staff to develop/assemble the following:

- Agenda and Lesson Plan (retain in program file)
- Sufficient electronic resources for participant use (as appropriate)
- Registration, sign-in and evaluation forms

The Midwest Consortium for Hazardous Waste Worker Training is devoted to professional facilitator freedom while maintaining consistency of training. If you are a new trainer, the lead trainer at your center will provide assistance and initially will observe programs you facilitate. You may be asked to team-teach with an experienced trainer as you gain skills in MWC programs. If programs exceed 25 participants, 2 facilitators are needed for any activity.
Facilitator Preparation

Every facilitator should be familiar with the material in the PowerPoint, this Facilitator Guide, and the Skills Checklist found in this Guide. A copy of the Skills Checklist should be made for each participant. The Checklists will be retained as part of the program file. Note that with reconnaissance, this program could be modified to more closely match the policies and procedures used at the participant’s facility and this should be done so if possible.

Note that this content includes assessment/treatment flow charts appropriate for responders with various levels of medical training. Reconnaissance would allow the facilitator to adjust the content to match the medical training of the participants.

Also, the final slide contains national resources, but the facilitator could add local and/or company resources if known. These may include mental health resources for the responders and treatment/recovery resources for those who have overdosed.

Carefully review the section(s) of the Facilitator Guide which you are teaching before preparing your lesson. Lesson plan forms shown on the next two pages may be helpful when drafting your presentation outline.

Agenda

The following is a sample agenda:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Opioid Overdose Emergency Response Modules 1-3</td>
<td>90 minutes</td>
</tr>
<tr>
<td>Closing and Evaluation</td>
<td>15 minutes</td>
</tr>
</tbody>
</table>
Lesson Plan Form 1

<table>
<thead>
<tr>
<th>Teaching Methods for This Lesson Plan (check each method you will use)</th>
<th>Audiovisual Requirements (check each that is needed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation</td>
<td>Training handbook</td>
</tr>
<tr>
<td>Discussion</td>
<td>Supplemental material</td>
</tr>
<tr>
<td>Question and answer</td>
<td>PowerPoint</td>
</tr>
<tr>
<td>Hands-on simulation</td>
<td>Web Sites loaded on devices:</td>
</tr>
<tr>
<td>Team teaching</td>
<td></td>
</tr>
<tr>
<td>Small-group exercises</td>
<td></td>
</tr>
<tr>
<td>Case study</td>
<td></td>
</tr>
<tr>
<td>Other (describe):</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference Materials (list all materials needed-paper or electronic)</th>
<th>Special Space or Facility Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(List any room size or special facility regulations here, such as set-up areas, equipment storage concerns, etc.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggested Discussion Questions (think in advance what you might be asked, and prepare responses)</th>
<th>Suggested Facilitator Preparation (consult with others as needed to improve preparation skills)</th>
</tr>
</thead>
</table>
Lesson Plan Form 2 - use to organize your facilitation.

<table>
<thead>
<tr>
<th>Subject Area or Element</th>
<th>Detail</th>
<th>Reference Number or Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major subject heading or Roman numeral item from outline format.</td>
<td>Detailed breakdown of subject area or element. This detail will necessarily occupy more space than shown here.</td>
<td>e.g., page number in training handbook, section number of regulation, or audiovisual material.</td>
</tr>
</tbody>
</table>
Instructional Resources

The instructional resources related to Opioids listed below may be useful in preparation and during the program.

NIEHS Worker Training Program https://tools.niehs.nih.gov/wetp/index.cfm?id=2587

Centers for Disease Control and Prevention (CDC) - https://www.cdc.gov/niosh/topics/fentanyl/risk.html


Presentation of Material

A PowerPoint presentation was created to facilitate communication of this material.

Exercise

Class activities and exercises enhance the learning process; therefore, it is strongly recommended that you make activities and discussions comfortable so that everyone can participate. Assume that every class will have participants with a wide range of communication skills. Some trainees will have no problems participating in group discussion, while others may have a hard time talking in front of the group.

Suggestions for facilitating group activities and discussions include:

- Allow trainees to freely express their values, attitudes, and opinions.
- Do not judge trainee's responses.
- Facilitate discussion by paraphrasing and clarifying. It is seldom appropriate for the facilitator to give opinions.
- Avoid putting people on the spot. Instead of asking individuals for answers, have a volunteer spokesperson present findings to the entire group.
• Keep the groups focused on the task at hand. Because small-group exercises can draw heavily on the trainees' personal experience, sometimes conversation can drift.

• Be alert to the potential for one person to dominate work in small groups. If you see this happening, facilitate participation by other members of the group.

• Keep the trainees alert and interested by encouraging participation. If the groups are not participating or giving only cursory answers, ask them probing questions linked to previous work or life experiences.

Evaluation

Evaluation provides input from participants regarding value to them, achievement of learning objectives and insights into how to improve the program. NIEHS supports ‘model programs’ that employ interactive training methods to build skills; see https://tools.niehs.nih.gov/wetp/public/hasl_get_blob.cfm?ID=11266&file_name=WTP_Minimum_Criteria_062818_Final_508.pdf. Collection and use of evaluation data are key to program improvement. Adherence to these criteria is a term-and-condition of NIEHS funding.

Evaluation forms are shown at https://mwc.umn.edu.

Successful Completion for this program requires the following:

• Attendance for the entire program

• 100% on Skills Checklist

All must be documented in the Program File.
Opioid Overdose Emergency Response - Introduction

Time Requirement: 15 minutes

Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

Materials

• Registration forms
• Open-space room which will allow for group discussion and small group activities
• Whiteboard or equivalent; markers

Objectives for the Full Program

When completed, participants will better be able to:

➢ Describe opioid characteristics and the opioid epidemic
➢ Perform initial actions, including donning of PPE, required for a response to a potential opioid overdose
➢ Identify how to use Naloxone (Narcan)
➢ Administer Naloxone (Narcan) during an overdose response

During the brief introduction, the following will be accomplished:

• Introductions
• Registration
• Sign-in
Teaching Methods

The introduction combines presentation with discussion. It is important as a facilitator to gauge the level of knowledge of the participants. A discussion of experience of each participant may be useful.

Suggested Facilitator Preparation

- Prepare lesson plan

Minimum Content Requirements

- Introduction of facilitator(s), program, participants
- Complete registration forms (if not done in advance)
- Everyone signs in

Question You May be Asked

Am I likely to be exposed to a dangerous amount of opioids when responding to an overdose?

This will be addressed during the program. Post any questions that will be answered later in the program to a ‘parking lot’ and display where everyone can see. Check the items off as the program progresses.

Presentation of the Session

The session can be presented as follows.

Introduce facilitator(s) and provide any needed orientation. Review MWC, NIEHS ‘model programs’ and uses of evaluation. Note that attendance is required for the duration of the program.

Present the agenda that has been prepared, noting that training time does not include lunch or breaks. Post where all can see, if desired.

Ask participants to introduce themselves, describing experience and what each wants to gain from the session. Note any goals identified by participants that are not in the listing above - address any that may fit with the session materials and describe why remaining goals are outside the scope of this training.

Collect any forms and provide to program staff for retention.
Opioid Overdose Emergency Response

The session is presented according to your lesson plan.

Time Requirement: 90 minutes
Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

Materials

- Whiteboard or equivalent; markers
- Technology shown in the lesson plan
- Skills Checklist for each participant
- PPE for each participant (preferably the PPE participants use at their workplace)
- Manikin(s)
- Practice (air only) nasal applicator(s)

Objectives

When completed, participants will be able to:

- Describe opioid characteristics and the opioid epidemic
- Perform initial actions required for a response to a potential opioid overdose
- Identify how to use of Naloxone (Narcan)
Administer Naloxone (Narcan) during an overdose response

Teaching Methods

- Presentation/discussion
- Exercise

Suggested Facilitator Preparation

- Review the PowerPoint
- Review this guidance
- Review the lesson plan

Minimum Content Requirements

The following are minimum content objectives for the session:

- Opioid characteristics and epidemic
- Opioid overdose response Initial Actions
- Administration of Narcan/Naloxone
- Decon following opioid response

Question You May be Asked

How can we tell if the patient is having an opioid overdose or some other difficulty?

It can be difficult to distinguish an opioid overdose from other cardiac or respiratory emergencies. You can identify an opioid overdose by a combination of three symptoms known as the Opioid Triad: coma, pinpoint pupils, respiratory depression. Other factors to consider include patient history, evidence on scene and bystander reports.
Presentation of Material

The session can be presented as follows:

Module 1: Opioids

Use the PowerPoint slides and notes below to inform participants of opioids and the related epidemic.

The color and texture of fentanyl do not indicate anything about its strength. That can only be determined by chemical analysis. Similarly, the texture of fentanyl may range from light and finely powdered to somewhat coarse, cakelike, and crumbly, resembling powdered milk. Occasionally, fentanyl may have a medicinal or chemical odor, but this is not characteristic. There is nothing about the appearance of fentanyl samples that is unique, and it is impossible to distinguish them from heroin except by chemical analysis.

Fentanyl can be injected, snorted/sniffed, smoked, taken orally by pill or tablet, and spiked onto blotter paper. Fentanyl patches are abused by removing their gel contents and then injecting or ingesting these contents. Patches have also been frozen, cut into pieces, and placed under the tongue or in the cheek cavity.

Illicitly-produced fentanyl is sold alone or in combination with heroin and other substances and has been identified in counterfeit pills, mimicking pharmaceutical drugs such as oxycodone.

Most recent cases of fentanyl-related harm, overdose, and death in the U.S. are linked to illegally-made fentanyl. It is sold through illegal drug markets for its heroin-like effect. It is often mixed with heroin and/or cocaine as a combination product - with or without the user’s knowledge - to increase its euphoric effects.

Module 2: Initial Actions

Use the PowerPoint and notes below to help participants understand the Initial Actions required for a response to a potential opioid overdose.

Because the level of PPE needed for response to liquid or high quantities of fentanyl requires a trained HAZMAT team, the remainder of the program will focus primarily on dry/powdered encounters.
Examples of incidental exposures include when an EMS worker or law enforcement officer responds to an emergency call where a person has overdosed and drug powders are on the individuals clothing or vehicle. In these cases, there would be a concern about breathing in the powders (inhalation), transferring them from hand to mouth (ingestion), and transferring them to the skin, eyes, and mucous membranes (absorption).

NIOSH: “Potential exposure routes of greatest concern include inhalation, mucous membrane contact, ingestion, and percutaneous exposure (e.g., needlestick). Any of these exposure routes can potentially result in a variety of symptoms that can include the rapid onset of life-threatening respiratory depression. Skin contact is also a potential exposure route, but is not likely to lead to overdose unless large volumes of highly concentrated powder are encountered over an extended period of time. Brief skin contact with fentanyl or its analogues is not expected to lead to toxic effects if any visible contamination is promptly removed. There are no established federal or consensus occupational exposure limits for fentanyl or its analogues.”

Relate to participants that one challenge of opioid overdose response is that responders are unlikely to know how much opioid is present and in what format prior to arriving at the scene. Responders may not even know initially that they are responding to an overdose.

Module 3: Treatment

Use the PowerPoint to identify steps required to complete the Incident Action Plan when responding to a potential opioid overdose.

Note there are two American Health Association flow charts, based on the medical training of the responder. Take the opportunity to encourage participants to get CPR certified because CPR may be required for the person experiencing the overdose or the response may end up being for something other than an overdose.

This guidance will focus on use of the intra-nasal (IN) delivery of Narcan, as it is easier and more convenient to use in most situations than an injectable.

Note that Naloxone will not harm a patient who is experiencing cardiac or respiratory arrest from causes other than opioids.
Exercise – Narcan

**Purpose:** To practice administering Narcan during a simulated opioid overdose response.

**Directions:** Divide the group into teams based on the number of manikins available. Each team will respond to a simulated opioid overdose and utilize necessary PPE and precautions while assessing and treating a patient. Each participant should have the opportunity to assess the patient and practice administration of Narcan. Allow 20-30 minutes for the exercise, depending on the number in each team. Afterwards, the entire group will assess the response during a debrief. Each participant will complete their Skills Checklist. Note that the Skills Checklist contains a range of potential actions, which can be adapted to the medical training level of the participants. Actions suited for healthcare providers such as taking pulse and rescue breathing can be included or excluded as appropriate. Collect a Skills Checklist from each participant to be included in the program file.

**Setup:** Each team should have a manikin and practice (air only) nasal applicator.

**Dispatch:** Medical emergency, an unconscious employee.

**Patient:** Unconscious, with pinpoint pupils and breathing <8 per minute.
Naloxone/Narcan Administration Skills Checklist

**Purpose:** To practice the administration of a nasal Naloxone (Narcan) device.

**Directions:** Your instructor will provide you with a simulated opiate overdose scenario. You will practice assessment and treatment of the patient following the AHA flow chart and the Skills Checklist.

<table>
<thead>
<tr>
<th>Nasal Naloxone/Narcan Administration</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you wear appropriate PPE, including respiratory protection?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you identify and assess the victim for responsiveness?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Is breathing adequate? (8 breaths per minute, no cyanosis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Are there pinpoint pupils?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Is there a pulse?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you call 911 or activate emergency response system per organization or facility protocol?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you check for medical alert tags?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you make the area safe for the victim?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you initiate CPR and AED protocol, if indicated?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If there were no respirations, did you initiate rescue breathing using a pocket mask or bag valve mask with oxygen? (optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you determine the need to administer the Mucosal Atomization Device (MAD)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you remove the two yellow caps off the atomizer and one red/purple off the vial?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you attach the MAD by screwing it to the top of the plastic delivery device?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you administer a 1 mg of Narcan in each nostril? (Maximum of 2 Mg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you administer a second dose after 3-5 minutes?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you continue to monitor for respirations (and pulse)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you transport the victim to the local emergency department via EMS?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name: ___________________ Date: _____________ Instructor__________________
Closing and Program Evaluation

Time Requirement: 15 minutes
Number of Facilitators: 1 or more, consistent with ratio shown in Minimum Criteria

Materials

- Whiteboard or equivalent; markers
- Evaluation forms

Objectives

- Review program objectives
- Answer questions
- Collect feedback (evaluation forms)

Teaching Methods

Discussion
**Suggested Facilitator Preparation**

Assure you have evaluation forms prior to the program.

**Minimum Content Requirements**

The following are minimum content requirements for the section:

- Evaluation
- Answer last questions, including anything remaining in the parking lot
- Provide certificates for those who met the definition of successful completion; provide remediation according to Training Center and MWC policy for anyone who did not attend the entire program.

**Question You May Be Asked**

“How do I get more training?”

If additional opioid training is desired, MWC offers other opioid training options. The materials can be found at: [http://mwc.umn.edu](http://mwc.umn.edu). Participants can also be directed to opioids materials found at the NIEHS website here: [https://tools.niehs.nih.gov/wetp/index.cfm?id=2587](https://tools.niehs.nih.gov/wetp/index.cfm?id=2587).

For other topics, provide your upcoming training schedule or reference other MWC members who provide the needed training.

**Presentation of the Session**

Thank participants for attending the program.

Review the goals of the program.

This is an opportunity for final questions and to assure that the list of questions has been addressed during the program.

Evaluation is important to continued program improvement. This should not be rushed. Provide time to complete the program evaluation forms and collect them.