

# World Health Organization Recommendations for Community Management of Opioid Overdose Reviewed by ACEP Clinical Policies Committee

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**Editor's Note:** *The ACEP Clinical Policies Committee regularly reviews guidelines published by other organizations and professional societies. Periodically, new guidelines are identified on topics with particular relevance to the clinical practice of emergency medicine. This article highlights recommendations for community management of opioid overdose published by the World Health Organization (WHO) in 2014.*

Opioid abuse, dependence, and overdose leading to death are epidemic. From 2001 to 2014, the number of deaths in the United States attributed to prescription opioids tripled, and deaths due to heroin increased fivefold; in 2014, nearly 30,000 deaths were attributed to opioids.<sup>1</sup> This trend is especially concerning considering that naloxone, an antidote to treat respiratory depression due to opioid overdose, has been available for more than 50 years.

Emergency providers face the complications and consequences of opioid abuse and overdose every day, from emergency medical services first responders to police and firefighters to physicians in the emergency department. Recently, WHO published recommendations based on the best available evidence to prevent mortality associated with opioid overdose.<sup>2</sup>

A WHO guideline development group was established in 2013 to identify where advice was most needed to effectively treat opioid overdose. Clinical questions were developed in PICO (population, intervention, comparator, outcome) format, and available evidence was reviewed for each. Pooled evidence was rated according to Grading of Recommendations Assessment, Development, and Evaluation (GRADE) criteria, and four recommendations were set and ranked as either "strong," meaning the group was confident that the recommendation was applicable in most situations, or "conditional," denoting that there may be some situations in which the recommendation does not apply.<sup>3</sup>

## WHO Recommendation #1

People likely to witness an opioid overdose should have access to naloxone and be instructed in its administration to enable them to use it for the emergency management of suspected opioid overdose.

Strength of recommendation: **Strong**

Although the evidence backing this recommendation is slim, the potential benefit of the intervention is so great that the level of this recommendation is listed as strong. The guideline defines “people likely to witness an opioid overdose” as people at risk of opioid overdose themselves, friends and families of those at risk of overdose, and those whose work may bring them into contact with overdose (this includes health care workers, police, emergency service workers, people providing accommodation to people who use drugs, peer educators, and outreach workers).

## WHO Recommendation #2

Naloxone is effective when delivered by intravenous, intramuscular, subcutaneous, and intranasal routes of administration. Persons using naloxone should select a route of administration based on the formulation available, their skills in administration, the setting, and local context.

Strength of recommendation: **Conditional**

This broad recommendation is graded conditional given the variety of settings, skill levels, and access to medical equipment among those likely to witness an overdose. Until recently, intranasal administration of naloxone in the United States was an off-label use, a limitation cited by the guideline authors. However, in November 2015, the FDA approved an intranasal spray formulation of naloxone in an expedited review.<sup>4</sup>

## WHO Recommendation #3

In a suspected opioid overdose, first responders should focus on airway management, assisting ventilation, and administering naloxone.

Strength of recommendation: **Strong**

It always goes back to the ABCs: ventilation is of utmost priority in resuscitation of suspected opioid overdose patients. The authors made the following stepwise recommendations for treating a suspected opioid overdose:

- Apply vigorous stimulation (most commonly sternal rub), check and clear airway, and check respiration—look for chest rising and falling.
- In the presence of vomit, seizures, or irregular breathing, turn the patient on his or her side and, if necessary, clear the airway of vomit.
- In the absence of regular breathing, provide rescue ventilation and administer naloxone.
- If there are no signs of life, commence chest compressions.
- Readminister naloxone after two to three minutes, if necessary.
- In all cases, call for professional assistance.
- Monitor the person until professional help arrives.
- When available, CPR mouth barriers should be used for rescue ventilation.

## WHO Recommendation #4

After successful resuscitation following the administration of naloxone, the affected person should have their level of consciousness and breathing closely observed until they have fully recovered.

Strength of recommendation: **Strong**

“Full recovery” is defined as asymptomatic and at baseline mental status two hours after the last dose of naloxone. Because of the variable half-lives of opioids, the length of observation and determination of recovery should be guided by the specific agent(s) ingested as well as the individual patient’s clinical presentation.

The guideline authors concede that these recommendations do not address the underlying cause of opioid dependence and overdose and that much more work is needed to solve this growing crisis. Although not a permanent fix, naloxone that is widely available to all those likely to witness an opioid overdose can save lives and hopefully stem the tide of opioid overdose deaths.

## References

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