



**Indian Health Service  
National Pharmacy and Therapeutics Committee  
Treatment of Opioid Overdose  
NPTC Formulary Brief  
May 2014**



**Background:**

In May 2014, the I.H.S. NPTC reviewed the treatment of opioid overdose. The discussion included a review of the epidemiology of opioid overdose, a summary of national initiatives to curb overdose deaths, and a discussion around take home naloxone. Given high numbers of opioid prescriptions and prevalence of overdose, along with the safety and efficacy of naloxone for opioid reversal, naloxone was added to the National Core Formulary.

**Discussion:**

Drug overdose deaths are the leading cause of injury death in the US in 2013, the majority of which were due to prescription drugs. Naloxone (a pure opioid antagonist) rapidly reverses effects of opioid overdose and was FDA approved in 1971 for this indication. Evzio® (commercially available naloxone auto-injector) was approved in April 2014 as the first drug-device designed to deliver naloxone outside of the healthcare setting by patient, family members, and other caregivers in case of an opioid overdose. It comes with a trainer device, provides verbal instructions on use and is administered IM or SQ.

Take home naloxone distribution programs have been initiated in 17 states and cities including New York City, Baltimore, Boston, San Francisco and Chicago. As of 2008: 21,000 persons were trained and there were 2,600 overdose reversals. Project Lazarus instituted a community-based overdose prevention program in rural North Carolina, where there were some of the highest overdose rates in the country. After initiation of this program, which included use of intranasal naloxone for opioid reversal, the overdose death rate dropped from 46.6 to 29.0 per 100,000 people in 2010.

Take home naloxone should only be issued with comprehensive training on safe administration and overdose management. It is not advised for self-administration and is only for use by witnesses or bystanders. Naloxone can be administered via intramuscular injection (prescribed with a needle) or intranasal route (prescribed with a mucosal atomizing device). Education around take home naloxone also advises on CPR techniques and emphasizes the importance of calling for an ambulance in all cases as soon as possible, even if naloxone has been administered. Naloxone distribution should be targeted to high risk times such as transitions from relative abstinence to greater access, like release from jail or prison to community settings. Naloxone should also be targeted to high risk populations, like patients with a history of prior overdose, injection drug use, or those that have difficulty accessing care (i.e. rural settings.) Those prescription opioid users on high doses, long acting opioids (i.e. methadone), on concurrent sedating medications, with concomitant alcohol use, liver or respiratory disease are also consider high risk and should be considered for take home naloxone.

Proponents of take home naloxone feel that it is effective in reducing heroin overdoses. It has a low risk of adverse events and is relatively inexpensive. Since most overdoses are witnessed, bystander intervention could be life-saving. There are also analogous existing prescriptions by PCPs which include epinephrine pens to be administered for anaphylaxis. Finally, proponents feel this would encourage physicians to discuss the risk of opioid overdose with their patients.

Opponents of take home naloxone feel that this can be interpreted as health professionals condoning injection drug use or that this may encourage heavy drug use. Naloxone is not effective for those that inject or overdose alone. Naloxone is not sufficient in all cases to resuscitate victims and some feel naloxone may delay calling for additional help. Despite the documented overdose reversals with naloxone, there has not been robust statistical evidence to support a decrease in overdose mortality.

**Findings:**

- \* Out of hospital use of naloxone appears to decrease opioid overdoses and mortality but more robust data is needed confirm efficacy
- \* Given high number of opioid prescriptions and prevalence of opioid overdose, along with safety and efficacy of naloxone for opioid reversal, naloxone was added to the National Core Formulary
- \* Use of Take Home Naloxone can be considered at IHS sites but a comprehensive training and education program should implemented

If you have any questions regarding this document, please contact the NPTC at [IHSNPTC1@ihs.gov](mailto:IHSNPTC1@ihs.gov). For more information about the NPTC, please visit the [NPTC website](#).

**References:**

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