American Red Cross
Scientific Advisory Council

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Position Statement on
Overdose Education and Naloxone Distribution

It is the position of the American Red Cross Scientific Advisory Council that overdose education programs and naloxone distribution programs should be widely available to the community. **Furthermore, overdose education programs should include training on naloxone administration, the potential complications of naloxone administration, and the management of these complications.**

The American Red Cross Scientific Advisory Council strongly supports legislation and policies that promote overdose education and the widespread availability of naloxone to those using opioids, people likely to encounter overdoses, first responders, and the general public; and considers these tools as a standard to help reduce mortality and increase opportunities for secondary prevention in the current opioid epidemic in North America.

Overdose is the leading cause of unintentional death in the United States (US) and opioids, such as heroin, fentanyl and oxycodone, account for approximately two-thirds of these deaths.(1,2,3) Opioid use disorder and associated harms are an escalating concern in the context of the COVID-19 pandemic, and many of the societal, resource scarcity, and infrastructural changes associated with the pandemic continue to have a disproportionate impact on the most marginalized members of our communities. (21) Opioid overdose resulted in 47,600 deaths in 2017 making it more likely to die in the US that year of an opioid overdose than a motor vehicle collision. (3) Over the last 20 years, the age-adjusted rate of drug overdose deaths increased from 6.1 per 100,000 in 1999 to 21.7 per 100,000 in 2017, with opioid deaths being the main determinant in the data.(1,2) In 2017 approximately 130 persons died per day in the US from opioid overdose, leading the US Department of Health and Human Services to declare the opioid epidemic a public health emergency. (2,3) An estimated 2.0 million people age 12 and over have an opioid use disorder (addiction) and approximately 10.3 million people in this same population misused opioids in 2018, representing a population that is at high risk of opioid related mortality. (4) In addition, those with opioid addiction are at high risk for contracting infectious disease, and developing compilations of those diseases. (19,20) This includes infections not only from injectable drug use and sexually transmitted disease, but also respiratory illness, which may be of particular importance in epidemics and pandemics such as COVID-19. (19,20,21) However, it is not only those that use illicit opioids that are at risk of overdose, individuals who have been prescribed opioids for medical purposes, and their family members, are also at risk of overdose and accidental death. (11)

While the opioid epidemic effects every geographic location and socioeconomic status in North America, tools are available to combat this epidemic. Opioid education and naloxone distribution (OEND) programs are associated with a reduced mortality from opioid overdose. (8,9) Education is an essential aspect of preventing opioid deaths and the American Red Cross provides public educational programs that teach opioid overdose education, including the recognition of opioid overdose, use of the overdose reversal agent naloxone, and the importance of activating emergency services. While educating the public on the recognition and treatment of opioid overdose is essential, naloxone, a medication used to reverse opioid overdose, can prevent death when administered to an individual experiencing opioid overdose. Naloxone can be used by both

lay and trained medical providers and naloxone distribution programs have also been associated with reduced mortality from opioid overdose. (6,7,8,9,12,18) Programs that distribute naloxone widely to communities, along with education programs, demonstrate that the lay public can be taught how to recognize an opioid overdose and administer naloxone with a suspected overdose, and that this can lead to a measurable reduction on mortality in the population. (6-9,13,14,18)

There is a risk of potential complications with use of naloxone, including the induction of withdrawal symptoms. Pulmonary edema can occur in opioid overdose with or without the administration of naloxone and is a specific complication that warrants medical evaluation for all opioid overdoses. (15,16) Due to the risk of complications, educational programs should include training on naloxone administration, the potential complications of naloxone administration, and the management of these complications. However, as naloxone can be a life-saving medication, its use in judicious doses, with careful monitoring for complications, outweighs the potential risks.

Although many states have enacted legislation that makes naloxone easier to obtain, barriers such as availability, cost, and training requirements to naloxone distribution continue to exist and hinder the availability of this life-saving medication. (10) Policies and legislation that lessen these barriers and support widespread distribution increase the odds of naloxone being available to the responder to help save lives. The Red Cross fully supports strategies that diminish barriers and assist the public in gaining access to naloxone.

Overdose education and naloxone distribution programs have a demonstrable effect on saving lives from opioid overdose and should be considered a standard for increasing awareness, training and naloxone availability to combat the opioid epidemic. Promoting policies that support education and the widespread availability of naloxone will increase survival from opioid overdose. Educational programs on the use of naloxone should include training in the recognition and management of complications.

Resources:

1. Holly Hedegaard, M.D., Arialdi M. Miniño, M.P.H., and Margaret Warner, Ph.D. Drug Overdose Deaths in the United States. National Center for Health Statistics. Available at https://www.cdc.gov/nchs/products/databriefs/db329.htm Accessed 02/11/2020.
2. Centers for Disease Control and Prevention. Drug Overdose Deaths Available at: https://www.cdc.gov/drugoverdose/data/statedeaths.html. Accessed 02/11/2020.
3. National Safety Council. Accidental Deaths Hit Highest Number in Recorded U.S. History.. November 29, 2018. Accessed 02/22/2020 Available at: https://www.nsc.org/in-the-newsroom/nsc-statement-on-new-cdc-data-showing-a-rise-in-accidental-death
4. Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health Substance Abuse and Mental Health Services Administration. August 2019. Available at:

https://www.samhsa.gov/data/sites/default/files/cbhsq reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf
5. Murphy SM, Morgan JR, Jeng PJ, Schackman BR. Will converting naloxone to over-the-counter status increase pharmacy sales? Health Serv Res. 2019 Aug;54(4):764-772. doi: 10.1111/1475-6773.13125. Epub 2019 Feb 20.
6. Irvine, M. A., Buxton, J. A., Otterstatter, M., Balshaw, R., Gustafson, R., Tyndall, M., ... & Coombs, D. (2018). Distribution of take-home opioid antagonist kits during a synthetic opioid epidemic in British Columbia, Canada: a modelling study. The Lancet Public Health, 3(5), e218-e225.
7. Irvine, M. A., Kuo, M., Buxton, J. A., Balshaw, R., Otterstatter, M., Macdougall, L., ... & Coombs, D. (2019). Modelling the combined impact of interventions in averting deaths during a synthetic-opioid overdose epidemic. Addiction, 114(9), 1602-1613.
8. Walley, A. Y., Xuan, Z., Hackman, H. H., Quinn, E., Doe-Simkins, M., Sorensen-Alawad, A., ... & Ozonoff, A. (2013). Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. Bmj, 346, f174.
9. Naumann, R. B., Durrance, C. P., Ranapurwala, S. I., Austin, A. E., Proescholdbell, S., Childs, R., ... & Shanahan, M. E. (2019). Impact of a community-based naloxone distribution program on opioid overdose death rates. Drug and alcohol dependence, 204, 107536.
10. NIH National Institute of Drug abuse Accessed 2/25/2020. Updated June 2018. Available at: https://www.drugabuse.gov/publications/medications-to-treat-opioid-addiction/naloxone-accessible
11. Garg RK, Fulton-Kehoe D, Franklin GM. Patterns of Opioid Use and Risk of Opioid Overdose Death Among Medicaid Patients. Med Care. 2017 Jul;55(7):661-668. doi: 10.1097/MLR.0000000000000738.
12. Kerr D, Kelly AM, Dietze P, Jolley D, Barger B. Randomized controlled trial comparing the effectiveness and safety of intranasal and intramuscular naloxone for the treatment of suspected heroin overdose. Addiction. 2009 Dec;104(12):2067-74. doi: 10.1111/j.1360-0443.2009.02724.x.
13. Wagner KD, Valente TW, Casanova M, Partovi SM, Mendenhall BM, Hundley JH, Gonzalez M, Unger JB. Evaluation of an overdose prevention and response training programme for injection drug users in the Skid Row area of Los Angeles, CA. Int J Drug Policy. 2010 May;21(3):186-93. doi: 10.1016/j.drugpo.2009.01.003. Epub 2009 Mar 5.
14. Doyon S, Benton C, Anderson BA, Baier M, Haas E, Hadley L, Maehr J, Rebbert-Franklin K, Olsen Y, Welsh C. Incorporation of poison center services in a state-wide overdose education and naloxone distribution program. Am J Addict. 2016 Jun;25(4):301-6. doi: 10.1111/ajad.12384. Epub 2016 May 24.
15. Pelletier DE1, Andrew TA1. Common Findings and Predictive Measures of Opioid Overdoses. Acad Forensic Pathol. 2017 Mar;7(1):91-98. doi: 10.23907/2017.011. Epub 2017 Mar 1.
16. Farkas A, Lynch MJ, Westover R, Giles J, Siripong N, Nalatwad A, Pizon AF, Martin-Gill C. Pulmonary Complications of Opioid Overdose Treated With Naloxone. Ann Emerg Med. 2020 Jan;75(1):39-48. doi: 10.1016/j.annemergmed.2019.04.006. Epub 2019 Jun 8.

17. Wermeling DP1. Review of naloxone safety for opioid overdose: practical considerations for new technology and expanded public access. Ther Adv Drug Saf. 2015 Feb;6(1):20-31. doi: 10.1177/2042098614564776.
18. Eggleston W1,2, Calleo V2, Kim M2, Wojcik S2. Naloxone Administration by Untrained Community Members. Pharmacotherapy. 2020 Jan;40(1):84-88. doi: 10.1002/phar.2352. Epub 2019 Dec 17.
19. Grinspoon, P. A tale of two epidemics: When COVID-19 and opioid addiction collide. Harvard Health Blog. April 20, 2020. Accessed 5/26/2020. Available at: https://www.health.harvard.edu/blog/a-tale-of-two-epidemics-when-covid-19-and-opioid-addiction-collide-2020042019569.
20. Schwet TA, Calder T, Rosenthal E, Kattakuzhy S, Fauci AS. Opioids and Infections Diseases: A Converging Pulblic Health Crisis. J Infect Dis. 2019 Jul 2;220(3):346-349. doi: 10.1093/infdis/jiz133.
21. National Institute on Drug Abuse. COVID-19: Potential Implications for Individuals with Substance Use Disorders. April 06, 2020. Accessed 5/24/2020. Available at: https://www.drugabuse.gov/about-nida/noras-blog/2020/04/covid-19-potential-implications-individuals-substance-use-disorders