

National Association of State Alcohol and Drug Abuse Directors

Overview of State Legislation to Increase Access to Treatment for Opioid Overdose

September 2015 Update

Prepared by:
The National Association of State Alcohol and Drug Abuse Directors

With Support From:
The Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Treatment

NASADAD Board of Directors

President.....Cassandra Price (Georgia)
First Vice President.....Joseph Harding (New Hampshire)
Vice President for Internal Affairs.....Flo Stein (North Carolina)
Vice President for Treatment.....Joyce Starr (Ohio)
Vice President for Prevention.....Kim Fornero (Illinois)
Immediate Past President.....Mark Stringer (Missouri)
Secretary.....Kathy Stone (Iowa)
Treasurer.....Gary Tennis (Pennsylvania)

Regional Directors

Barbara Cimaglio (Vermont), Arlene Gonzalez-Sanchez (New York),
Gary Tennis (Pennsylvania), Rodney Bragg (Tennessee), Kevin Moore (Indiana),
Rochelle Head-Dunham (Louisiana), Kathy Stone (Iowa), Doug Thomas (Utah),
Kevin Quint (Nevada), Kathy Skippen (Idaho)

Executive Director

Robert I.L. Morrison

Prepared by the National Association of State Alcohol and Drug Abuse Directors (NASADAD), with support from the Substance Abuse and Mental Health Service Administration’s Center for Substance Abuse Treatment (SAMHSA/CSAT), under CSAT’s grant for “Technical Assistance to States for Implementation of the Substance Abuse Prevention and Treatment Block Grant.”

The views, opinions, and content are those of the author(s) and do not necessarily reflect the views, opinions, or policies of the Substance Abuse and Mental Health Services Administration’s Center for Substance Abuse Treatment (SAMHSA/CSAT).

Acknowledgements

Colleen Haller was the primary author of this report. She received significant support from Henrick Harwood, who supervised and also contributed to writing the report. This project would not have been possible without the guidance from the NASADAD Policy Committee and input from the NASADAD membership.

Overview of State Legislation to Increase Access to Treatment for Opioid Overdose

Preface

The following document discusses laws that States have enacted to increase access to treatment for opioid overdose, and in turn, to reduce fatal opioid overdose. These policies do not represent the full menu of options available in the States, but rather capture the most common policies that have been incorporated into State legislation related to overdose. With that being said, these strategies should be considered only one part of a comprehensive strategy that includes prevention efforts, access to treatment, and recovery support services. This paper was originally drafted in December 2013 and has been updated to reflect changes in State legislation that were passed between 2013 and July 2015. A tremendous amount of activity related to overdose has occurred in the States over the last two years. To learn more about some of the other efforts that States are using to address opioid overdose, please see NASADAD's results from the 2014 [State Substance Abuse Agencies, Prescription Drugs, and Heroin Abuse membership inquiry](#).

Opioid overdose in the United States

The rate of fatal overdose in the U.S. has tripled since 1991.¹ Widespread use of opioids, particularly opioid pain relievers, account for most of that increase.² In response, some States have enacted various policies that seek to reduce fatal opioid overdose. This brief summarizes some of the policies legislated by States to reduce opioid overdose deaths by improving access to naloxone and emergency medical services.

- 911 Good Samaritan laws
- Naloxone prescribing and administration protections
- Naloxone distribution programs

The following policies cover a spectrum of approaches though do not necessarily encompass all of the various strategies and programs that States have implemented in response to the increase in opioid misuse and opioid-related overdose deaths. The policies are divided into two categories: calling 911 and naloxone access. An explanation of each category and policy is provided below. For additional information regarding these and other potential strategies, please refer to the Additional Resources section at the end of this brief.

Calling 911

The pace at which opioid use can escalate to a fatal overdose is relatively slow. Rather than an immediate reaction, opioids gradually depress respiration until the person stops breathing – a process that can take hours.^{3,4,5,6} This offers a window of time in which victims can receive medical attention to reverse the overdose before significant brain damage or death occurs. Moreover, most opioid overdoses occur in the presence of someone else, such as a friend or family member.⁷ However, witnesses often do not call 911 during an overdose.^{8,9,10,11,12} This is particularly true among witnesses of a heroin overdose who cite fear of police involvement as the most common reason that they do not call 911.^{13,14,15,16} This is not entirely surprising given that in many States, both the caller and the victim may be arrested for possession of illegal substances, drug paraphernalia, or other offenses.¹⁷ This fear of police involvement among witnesses could potentially extend to users of other drugs, particularly unauthorized users of prescription opioid pain medication, given the potential for arrest and/or criminal charges. However, the current literature has yet to fully explore this population's overdose response behaviors. Fear of calling for help also increases the likelihood that witnesses will attempt common, yet ineffective revival strategies, such as shaking the victim, submerging them in cold water, or injecting them with salt, potentially worsening

their condition.¹⁸ Given the recent rise in overdose deaths, some States have opted to enact policies that attempt to reduce witnesses’ fear and encourage them to call 911 during an overdose. These laws vary in scope, but are generally referred to as “911 Good Samaritan” laws. Given the current literature, these Good Samaritan laws are best positioned to overcome the fears of heroin users and witnesses of heroin overdoses and to encourage the use of emergency medical services. However, it would be valuable to evaluate the effect of these laws on other populations.

911 Good Samaritan laws

As of July 2015, 31 States and the District of Columbia have enacted 911 Good Samaritan laws, an increase of 17 States since 2013. In broad terms, **these laws provide immunity for victims and witnesses who “act in good faith” to seek medical assistance when they believe an overdose is occurring.** These laws provide immunity for minor drug offenses that are discovered as a result of the Good Samaritan seeking medical assistance. These include immunity against arrest and/or prosecution for possessing a controlled substance or drug paraphernalia.¹⁹ Some States also provide protections for underage persons in possession of or under the influence of alcohol, among other protections.²⁰ This limited immunity does not extend to more serious offenses such as drug trafficking or violent crime. There may be some concern that by removing the threat of criminal action, these policies would increase illegal drug use. The literature on this particular issue is limited, but early evaluation results from Washington State’s 2010 Good Samaritan law have not found evidence for this kind of negative effect.²¹ Early results do show that 88% of users surveyed in Washington State said they would be more likely to call 911 during an overdose because of the new Good Samaritan law.²² For a list of the States with 911 Good Samaritan policies, please see Figure 2 on page 8.

A variant of the Good Samaritan law allows witnesses who call 911 (in good faith) to cite that action during criminal prosecution. The act of calling 911 would be cited in the hopes of reducing or mitigating any sentencing that follows. This does not guarantee that such an action would mitigate sentencing, but rather allows judges the discretion to utilize or consider it if deemed appropriate. This policy is often attached to a broader 911 Good Samaritan law, but it can also be passed as an independent policy, as in the case of Alaska and Maryland.^{23,24} To date, 15 States and DC allow calling 911 during an overdose to serve as a mitigating factor in criminal prosecution. In 2013, only 10 States included this language in their overdose legislation. For a list of the States with this policy, please see Figure 2 on page 8.

Naloxone

As previously discussed, the pace of an opioid overdose generally allows time for victims to receive emergency medical care before the overdose becomes fatal. In the case of opioids, administering naloxone has long been a standard of care in emergency rooms and with paramedics throughout the United States.^{25,26} Naloxone is a prescription medication that reverses the effects of an opioid overdose.²⁷ Administered most often via intramuscular injection or intranasally—naloxone binds to the opioid receptors in the brain, reviving the victim and restoring normal breathing.^{28,29} Naloxone is not a controlled substance, has no potential for abuse, and has no effect on the body in the absence of an opioid.^{30,31} Despite naloxone’s high degree of effectiveness in reversing opioid overdose and the presence of witnesses during most overdoses, thousands of opioid overdose victims fail to get timely access to this life-saving medication. Some of this can be explained by witnesses’ reluctance to seek medical attention (discussed above). Another issue is that emergency medical personnel often do not arrive in time to administer naloxone. This may be a result of the time it takes witnesses to recognize that an overdose is occurring or a delay in emergency response times due to location or other issues. These factors suggest that with proper training, witnesses of an overdose, such as friends or family members, may be better

positioned to administer naloxone in a timely manner than first responders. Over the last decade, many community-based programs, 40 States, and DC have taken steps to make naloxone more readily available in the community. In addition, the American Medical Association, American Public Health Association, and the Office of National Drug Control Policy have endorsed expanding access to naloxone as a strategy to prevent fatal overdose.^{32,33,34} Traditionally, efforts to increase naloxone access have focused on the heroin user population. However, as prescriptions for opioid pain relievers have increased, many communities have begun educating providers about responsible prescribing practices or encouraging them to co-prescribe naloxone with opioid pain relievers. The extent to which co-prescribing naloxone is being utilized is still largely unknown, and as a result, the literature evaluating its efficacy is limited. However, an evaluation of one program, Project Lazarus in Wilkes County, North Carolina (a region with particularly heavy opioid pain reliever use and overdose rates), found a 42% reduction in fatal overdose rates.³⁵ As communities evaluate the scope of their individual opioid overdose problems, there may be room to innovate different methods of expanding naloxone based on the individual population's needs. These methods should be rigorously evaluated to expand the body of literature concerning naloxone access and fatal opioid overdose.

Despite its growing acceptance, there are still several concerns that are commonly raised in response to expanding access to naloxone. One concern is about the safety of allowing lay persons to administer medical care. This is partially why many naloxone distribution programs involve a training component to ensure that witnesses can respond safely and effectively. In addition, some States have mandated that lay people who obtain and intend to administer naloxone receive overdose training.³⁶ However, as in the case of other medical emergencies such as a severe allergic reaction, the current literature suggests that trained bystanders can safely and effectively administer injections like naloxone.^{37,38,39} Another concern is that naloxone has a shorter half-life than many opioids, meaning that in some cases, the naloxone may wear off and the victim return to an overdose/depressed respiratory state.⁴⁰ This situation rarely appears in the literature, though if it did, a second dose of naloxone would be required. There are concerns as to whether a lay person would be equipped to recognize this and administer a second dose in a timely fashion, particularly if he or she is intoxicated.⁴¹ In addition, because naloxone blocks the opioid receptors, revived victims may experience acute withdrawal symptoms. This may cause the victim to attempt to use more opioids, even though doing so would be dangerous. However, there is preliminary evidence in the literature from naloxone distribution programs that peers are able to successfully administer a second dose when needed and prevent victims from using additional opioids, although efforts to evaluate these programs are still in the early stages.⁴² The final, and perhaps most common, concern about naloxone distribution is that by removing the threat of overdose, people will increase their drug use.⁴³ The current literature finds no evidence that this phenomenon is occurring.^{44,45,46,47}

As stated previously, 40 States and DC have passed laws that in some way expand the availability of naloxone. This is a dramatic increase compared to the 17 States that had such laws in 2013. The following sections explain the most common provisions from those laws: third party prescription, standing orders, liability protections, naloxone distribution programs, educational strategies, and over-the-counter naloxone. While these are discussed individually, they are interrelated in many ways and are often implemented in combination with one another.

Third party prescription

This refers to a law which allows a prescription for naloxone to be written for a friend or family member of someone considered at risk of opioid overdose. Naloxone is currently only approved by the FDA as a prescription medication.⁴⁸ However, due to the nature of naloxone, this creates a number of issues for prescribers and for patients. Firstly, potential overdose victims may be

uncomfortable asking their physician for a naloxone prescription.⁴⁹ In addition, overdose victims will be unable to administer naloxone to themselves, creating some uncertainty for prescribers. State laws governing medical practice generally require that physicians only write prescriptions for the person who will actually take the medication.⁵⁰ However, in the case of naloxone, the prescription and instructions on administering the drug may be better suited in the hands of a friend or family member who may be more likely to witness an overdose and to administer naloxone. This idea of prescribing a medication to someone other than the person receiving the drug is called “third party prescription.”⁵¹ Thirty-eight States have passed laws that enable physicians to write naloxone prescriptions to friends and family members of opioid users so that they may administer naloxone in the event of an opioid overdose, compared to 14 States in 2013.⁵² For a list of the States that allow third party prescription, please see Figure 2 on page 8.

Standing orders

A “standing order” is an order that prescribers write allowing a prescription medication to be dispensed to a patient that they have not examined who meets a certain set of criteria.⁵³ For example, a community-based organization may have an affiliated physician write a standing order for naloxone so that they can distribute it to anyone who meets the criteria. In the case of naloxone, the criteria may be as simple as someone who may be in a position to reverse an opioid overdose or someone who has received overdose training. This is not entirely unprecedented given that many paramedics currently operate under standing orders to be able to administer naloxone prior to arriving at the emergency room.⁵⁴ States may also use standing orders to allow pharmacies to distribute naloxone. Twenty-eight States that have passed overdose legislation have explicitly allowed physicians to write standing orders for naloxone. In 2013, only 6 States explicitly allowed standing orders. Some community-based naloxone distribution programs have received standing orders for naloxone in States that have not passed legislation that explicitly allows them. This is not surprising given that standing orders are commonly used in a variety of medical settings. However, using a standing order to increase access to naloxone may raise liability concerns for some physicians. Providing legal clarity may be preferred for physicians and community programs to avoid potential liability issues and encourage broader use. For a list of the States where overdose prevention laws allow standing orders, please see Figure 2 on page 8. Please note that Figure 2 does not capture all of the States where standing orders are in use, as there are at least 11 States where standing orders have been used without legislation since 2008.⁵⁵

Liability protections

These are laws that provide legal protection for physicians who prescribe naloxone or laypersons that administer it “in good faith.” Regardless of their desire to prescribe naloxone, some physicians are concerned about potential liability issues.⁵⁶ Most prescription drugs are taken orally, either in pill or liquid form. Naloxone, on the other hand, is often administered with an intramuscular injection – though other forms are available. Some physicians are concerned that if they prescribe naloxone to a lay person and something goes wrong, they will be held liable. In response, 35 States have enacted laws that provide protections for prescribers from civil and/or criminal liability, compared to 8 States in 2013.⁵⁷ Some States also provide liability protections for lay people who administer naloxone (38 States and DC in 2015, 13 States and DC in 2013).⁵⁸ These protections are specific to naloxone and are included in 41 States’ (including DC) overdose prevention policies in varying degrees. In 2013, only 16 States and DC passed such protections. For a list of the States that provide liability protections, please see Figure 2 on page 8.

Naloxone distribution programs

These are entities that make naloxone and education about its use available to opioid users, their families, and/or friends. Naloxone distribution programs are perhaps the oldest response to rising opioid overdose rates and exist throughout the United States. As of 2014, 140 organizations exist in 30 States and DC, providing overdose prevention services at 644 local sites.⁵⁹ From 1996 to 2014, those programs distributed naloxone to roughly 152,000 people and reported more than 26,000 successful overdose reversals.⁶⁰ More recently, an evaluation of Massachusetts’s distribution program revealed that overdose deaths decreased in those communities where the program was implemented compared to communities without the program. According to the State, by June 2014, the program distributed kits to 28,000 lay persons and recorded more than 3,200 reversals.^{61,62} Early evidence also suggests that naloxone distribution programs targeting heroin users are a cost-effective strategy, though this body of literature is still developing.⁶³ Naloxone distribution programs vary widely. It is outside the scope of this brief to describe all of the various training and educational components of each or how they receive their funding and support. With that said, 12 States made explicit reference to naloxone distribution programs in their overdose prevention policies in 2015, compared to 9 States in 2013. In some cases, relevant agencies were authorized to distribute grants to distribution programs and others authorized the creation of a State-run program. For a list of the States that included naloxone distribution programs in their overdose prevention policies, please see Figure 2 on page 8.

Educational strategies

Education and training are often included in discussions of expanding lay naloxone access. While education and training are embedded in many naloxone distribution programs, 10 States and DC included separate requirements for educational campaigns or grant making related to educational work in their overdose prevention legislation, an additional 5 States since 2013. These requirements range from offering grants to organizations that provide educational materials around overdose to creating physician trainings on how to use online prescription tracking systems to creating a prescription pain medication awareness program. These 10 States and DC are only a few of the many States that engage in these types of educational efforts. In a 2015 NASADAD survey of State Substance Abuse Agencies (SSAs), 88% of States (representing all 50 States and DC) were engaging in some kind of educational campaign regarding prescription drug misuse and 52% had educational campaigns around heroin. These activities varied among providing printed materials, creating internet campaigns, or running radio or television advertisements, to name a few.⁶⁴ For a list of the States that included educational components in their overdose prevention policies, please see Figure 2 on page 8.

Over-the-Counter Naloxone

Given the safety and effectiveness of naloxone, many public health advocates question why naloxone is not available over-the-counter. The prospects for changing naloxone’s FDA status are complex and unlikely to happen in the short-term. One important issue is that naloxone has a relatively small market value compared to most pharmaceutical products (roughly \$22 million vs. an estimated \$640 million for the auto-injector or “EpiPen” of the allergy rescue medication epinephrine).^{65,66} US law does not allow the same active ingredient to be marketed as both prescription and over-the-counter if there is not a “clinically meaningful” difference between the two, so should an existing manufacturer seek to release an over-the-counter product, the two products could not be intended for the same population, for the same health issue, in identical dosage and delivery forms.⁶⁷ Given this, the manufacturer would need to present the drug in a new way: a new formulation, delivery method, etc. and file a “new drug application” for over-the-counter approval. However, undertaking a new drug

application requires years and a significant financial investment from the drug company in the form of a user fee and requirements for extensive clinical trials and other research. In addition, over-the-counter products may have lower price points, decreasing the manufacturer’s return on investment. Between the substantial financial investment and naloxone’s limited market size, it is not likely that an existing manufacturer will submit an application nor that a new manufacturer will opt for over-the-counter status. In 2014 the FDA approved the first naloxone auto-injector: “Evzio.”⁶⁸ Though this product is specifically designed for lay people, the manufacturer sought approval as a prescription medication, rather than over-the-counter.

Public health advocates could also file a citizen petition to ask the FDA to change the rules surrounding naloxone’s status. This would not require a user fee from the manufacturer, but would require that the petitioners submit the same research and clinical trial data that a new drug application would require. If this data does not exist or is not accessible to private citizens, petitioners would need to work with scientists to conduct such trials which would be incredibly expensive.⁶⁹

Concluding thoughts

There are a variety of public health tools available for States to address fatal opioid drug overdose. The provisions discussed in this document are primarily intended to improve access to treatment with naloxone for opioid overdose, but do not encompass all of the possible policy responses that exist. As fatal drug overdoses have increased, there has been growing activity among States to come up with overdose prevention strategies. The timeline in Figure 1 below illustrates the pacing of overdose-related legislation since New Mexico passed the first of its kind (dealing with naloxone distribution and liability protections) in 2001. Another 10 States passed related legislation between 2006 and 2011, followed by 8 States passing legislation in 2012, 11 in 2013, 18 in 2014, and 26 in 2015. A flurry of State activity occurred between 2013 and 2015. The next few years will help shed light on whether these efforts can stem the tide of opioid overdose deaths and increase awareness of the risks of overdose. Please click on each State’s legislative citation in the table on page 8 to see a copy of the law text. You can also find a more detailed description of the provisions in each State’s law in The Network for Public Health Law’s report: [Legal Interventions to Reduce Overdose Mortality: Naloxone Access and Overdose Good Samaritan Laws](#). For additional information, please see the Additional Resources section at the end of this brief.

FIGURE 1: OPIOID OVERDOSE LEGISLATION TIMELINE

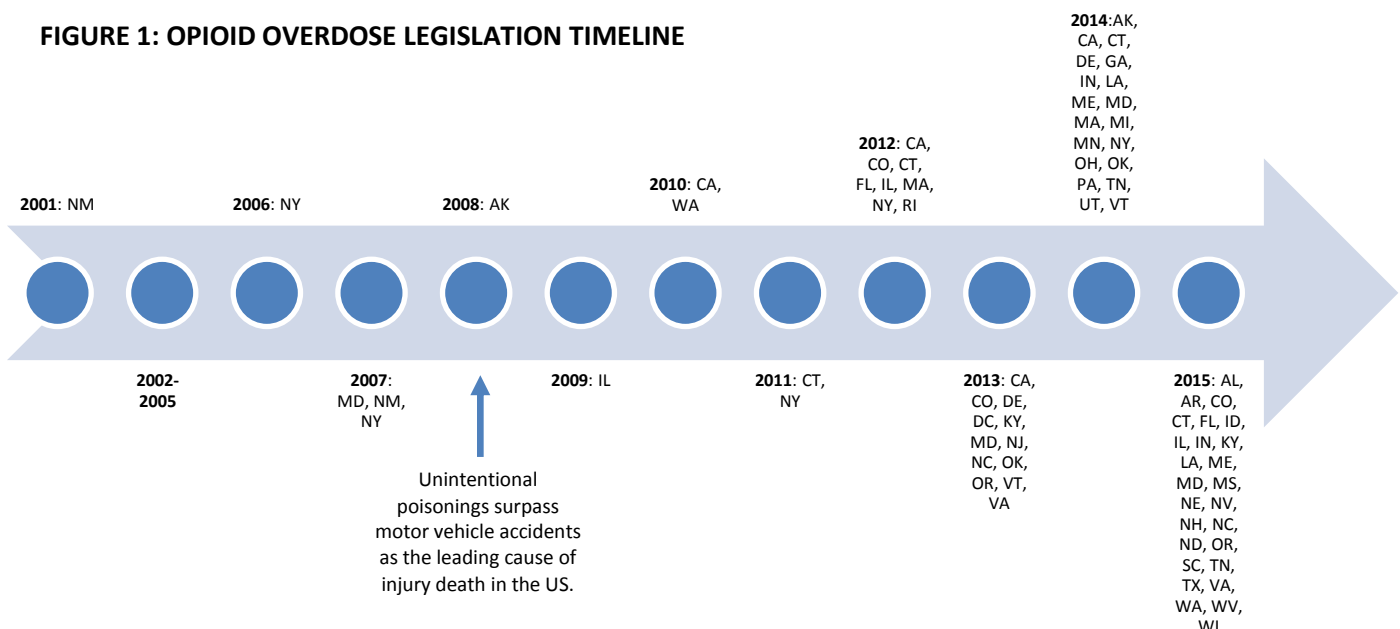


FIGURE 2: OVERVIEW OF RECENT ENACTED STATE OPIOID OVERDOSE LEGISLATION

States	Year	Citation	Good Samaritan	911 as Mitigating	3 rd Party Prescription	Standing Orders	Liability Protections	Naloxone Program	Educational Strategies
# States		43	32	16	38	28	41	12	11
Alabama	2015	HB 208	X		X	X	X		
Alaska	2008	Stat. 12.55.155		X					
	2014	Stat. 11.71.311	X						
Arkansas	2015	SB 543	X						
	2015	SB 880			X	X	X		
California	2010	AB 2145					X	X	
	2012	AB 472	X						
	2013	AB 635			X	X	X		
	2014	AB 1535			X	X	X		
Colorado	2012	SB 12-020	X						
	2013	SB 13-014			X		X		
	2015	SB 15-053			X	X	X		
Connecticut	2011	Public Act No. 11-210	X						
	2012	Public Act No. 12-159					X		
	2014	Public Act No. 14-61					X		
	2015	Public Act No. 15-198			X		X		X
Delaware	2013	SB No. 116	X						
	2014	HB 388				X	X	X	
DC	2013	B19-0754	X	X			X		X
Florida	2012	SB No. 278	X						
	2015	HB 751			X		X		
Georgia	2014	HB 965	X		X	X	X		
Idaho	2015	HB 108			X		X		X
Illinois	2009	Public Act 096-0361			X	X	X	X	X
	2012	Public Act 097-0678	X	X					
	2015	HB 0001			X	X	X		X
Indiana	2014	IC 35-38		X					
	2015	SB 406			X	X	X		
Kentucky	2013	HB 366			X	X	X		
	2015	SB 5	X		X	X	X		
	2015	SB 192	X						
Louisiana	2014	SB 422	X						
	2015	HB 210			X	X	X		
Maine	2014	Public Law Ch. 579			X				
	2015	Public Law Ch. 351			X	X	X	X	
Maryland	2009	Crim. Proc. 1-210		X					
	2013	SB 610			X		X	X	
	2014	HB 416	X	X					
	2015	SB 516			X	X	X		
Massachusetts	2012	Ses. Law, Chap. 192, Sects 32 & 11	X	X	X		X		
	2014	Ses. Law Chap. 165 Sect 132			X				

FIGURE 2: OVERVIEW OF RECENT ENACTED STATE OPIOID OVERDOSE LEGISLATION

States	Year	Citation	Good Samaritan	911 as Mitigating	3 rd Party Prescription	Standing Orders	Liability Protections	Naloxone Program	Educational Strategies
Michigan	2014	SB 857					X		
	2014	HB 5404					X		
	2014	HB 5405					X		
	2014	HB 5407			X		X		
Minnesota	2014	SF 1900	X	X	X	X	X		
Mississippi	2015	HB 692	X		X	X	X		
Nebraska	2015	LB 390			X		X		
Nevada	2015	SB 459	X	X	X	X	X	X	X
New Hampshire	2015	HB 270	X						
	2015	HB 271			X	X	X		
New Jersey	2013	SB 2082	X		X	X	X	X	X
New Mexico	2001	Stat. Ann. 24-23-1; NMAC 7.32.7-10					X	X	
	2007	SB 0200	X	X					
New York	2006	Public Health Law 3309					X	X	
	2007	Tit. 10, 80.138 (Regulation)			X				
	2011	S4454-B	X	X					
	2012	A10623							X
North Carolina	2014	S6477B			X		X	X	
	2013	SB 20	X		X	X	X		
North Dakota	2015	SB 154	X						
	2015	SB 2104			X	X	X		
Ohio	2014	HB 170			X		X		
	2014	HB 367							X
	2015	HB 4			X	X	X		
Oklahoma	2013	HB 1782			X				
	2013	HB 1419							X
	2014	Title 63-2-312.2			X				
Oregon	2013	SB 384			X		X	X	
	2015	SB 839	X						
Pennsylvania	2014	SB 1164	X		X	X	X		X
Rhode Island	2012	H 7248	X	X			X		
South Carolina	2015	Act No. 54			X	X	X		
Tennessee	2014	HB 1427			X	X	X		X
	2015	HB 1036	X	X					
Texas	2015	SB 1462			X	X	X		
Utah	2014	HB 119			X		X		
	2014	HB 11	X	X					
Vermont	2013	Act No. 71; Act No. 75	X	X	X	X	X	X	X
	2014	Act No. 195			X				
Virginia	2013	HB 1672			X		X	X	
	2015	SB 892	X						
	2015	HB 1458				X	X		
Washington	2010	SB 5516	X	X	X		X		

FIGURE 2: OVERVIEW OF RECENT ENACTED STATE OPIOID OVERDOSE LEGISLATION

States	Year	Citation	Good Samaritan	911 as Mitigating	3 rd Party Prescription	Standing Orders	Liability Protections	Naloxone Program	Educational Strategies
West Virginia	2015	HB 1671	X		X	X	X		
	2015	SB 335			X	X	X		
	2015	SB 523	X	X					
Wisconsin	2013	Act 200			X	X	X		
	2013	Act 194	X						

NOTE: This table provides a general overview of the types of provisions covered by each statute. For more detailed information, please refer to: the legislative text or Davis, C. (2015). Legal interventions to reduce overdose mortality: naloxone access and overdose good Samaritan laws. The Network for Public Health Law. (Additional Resources Section)

Additional Resources

- Bennett, S., et al. (2011). Characteristics of an overdose prevention, response, and naloxone distribution program in Pittsburgh and Allegheny County, Pennsylvania. *Journal of Urban Health* 88.6: 1020-1030. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3232410/>
- Davis, C. (2015). Legal interventions to reduce overdose mortality: naloxone access and overdose good Samaritan laws. The Network for Public Health Law. http://www.networkforphl.org/_asset/qz5pvn/network-naloxone.pdf
- Doe-Simkins, M., et al. (2009). Saved by the nose: bystander-administered intranasal naloxone hydrochloride for opioid overdose. *American Journal of Public Health* 99.5: 788-791. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2667836/>
- FDA 2012 Naloxone Meeting; <http://www.fda.gov/drugs/newsEvents/ucm277119.htm>
- FDA PowerPoint on Potential OTC (over the counter) Naloxone (presented at the FDA on April 12, 2012), <http://www.fda.gov/drugs/newsEvents/ucm277119.htm>
- Maxwell, S., et al. (2006). Prescribing naloxone to actively injecting heroin users: a program to reduce heroin overdose deaths. *Journal of Addictive Diseases* 25.3: 89-96. http://www.ihra.net/files/2010/08/23/Maxwell_-_Prescribing_Naloxone.pdf
- Piper, T., et al. (2008) Evaluation of a naloxone distribution and administration program in New York City. *Substance use & misuse* 43.7: 858-870. http://141.213.232.243/bitstream/handle/2027.42/60330/markham%20piper_evaluation%20of%20a%20naloxone%20program_2008.pdf?sequence=1
- Seal, K., et al. (2005). Naloxone distribution and cardiopulmonary resuscitation training for injection drug users to prevent heroin overdose death: a pilot intervention study. *Journal of Urban Health* 82.2: 303-311. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2570543/>
- Walley, A., et al. (2013). Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. *BMJ: British Medical Journal* 346. <http://press.psprings.co.uk/bmj/january/opioid.pdf>

Endnotes

- ¹ Centers for Disease Control and Prevention (CDC). (2011). "Vital signs: Overdoses of prescription opioid pain relievers—United States, 1999-2008." *MMWR: Morbidity and Mortality Weekly Report* 60: 1-6.
- ² Ibid.
- ³ Burris, S., et al. (2001). Legal aspects of providing naloxone to heroin users in the United States. *International Journal of Drug Policy* 12.3, 237-248.
- ⁴ Davis, C., et al. (2013). Changing law from barrier to facilitator of opioid overdose prevention. *The Journal of Law, Medicine & Ethics* 41:33-36.
- ⁵ Kim, D., et al. (2009). Expanded access to naloxone: Options for critical response to the epidemic of opioid overdose mortality. *American Journal of Public Health* 99.3: 402-407.
- ⁶ Sherman, S., et al. (2008). A qualitative study of overdose responses among Chicago IDUs. *Harm reduction journal* 5.1:2.
- ⁷ Burris, S., et al. (2001).
- ⁸ Baca, C., Grant, K. (2007). What heroin users tell us about overdose. *Journal of Addictive Diseases*, 26(4), 63-68.
- ⁹ Burris, S., et al. (2001).
- ¹⁰ Kim, D., et al. (2009).
- ¹¹ Seal, K., et al. (2003). Attitudes about prescribing take-home naloxone to injection drug users for the management of heroin overdose: A survey of street-recruited injectors in the San Francisco bay area. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 80(2), 291-301.
- ¹² Tracy, M. (2005). Circumstances of witnessed drug overdose in New York City: Implications for intervention. *Drug and Alcohol Dependence*, 79(2), 181-190.
- ¹³ Baca, C., Grant, K. (2007).
- ¹⁴ Burris, S., et al. (2001).
- ¹⁵ Seal, K., et al. (2003).
- ¹⁶ Tracy, M. (2005).
- ¹⁷ Burris, S., et al. (2001).
- ¹⁸ Ibid.
- ¹⁹ Davis, C. (2015). Legal interventions to reduce overdose mortality: Naloxone access and overdose good Samaritan laws. The Network for Public Health Law.
- ²⁰ Ibid.
- ²¹ Banta-Green, C., Kuszler, P., Coffin, P., & Schoeppe, J. (2011). Washington's 911 good samaritan drug overdose law-initial evaluation results. *Alcohol & Drug Abuse Institute*, University of Washington.
- ²² Ibid.
- ²³ Stat. 12.55.155, (Alaska Stat. 2008).
- ²⁴ MD Criminal Procedures 1-210, (Mary. Stat. 2009).
- ²⁵ Bazazi, A., et al. (2010). Preventing opiate overdose deaths: Examining objections to take-home naloxone. *Journal of health care for the poor and underserved* 21.4: 1108.
- ²⁶ Kim, D., et al. (2009).
- ²⁷ Ibid.
- ²⁸ Bazazi, A., et al. (2010).
- ²⁹ Kim, D., et al. (2009).
- ³⁰ Bazazi, A., et al. (2010).
- ³¹ Kim, D., et al. (2009).
- ³² "AMA Adopts New Policies at Annual Meeting." (2012). American Medical Association. <http://www.ama-assn.org/ama/pub/news/news/2012-06-19-ama-adopts-new-policies.page>
- ³³ "Preventing Overdose through Education and Naloxone Distribution." (2012). American Public Health Association. <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1443>
- ³⁴ Kerlikowske, G. (2012). Statement from White House Drug Policy Director on the Food and Drug Administration's public hearing regarding the role of naloxone in opioid overdose fatality prevention. <http://www.whitehouse.gov/ondcp/news-releases-remarks/statement-from-white-house-drug-policy-director-on-the-food-and-drug-administrations-public-hearing>
- ³⁵ Albert, S., et al. (2011). Project lazarus: Community-based overdose prevention in rural North Carolina. *Pain Medicine* 12: S77-S85.
- ³⁶ Davis, C., et al. (2015).
- ³⁷ Davis, C., et al. (2013).
- ³⁸ Kim, D., et al. (2009).
- ³⁹ Bazazi, A., et al. (2010).
- ⁴⁰ Kim, D., et al. (2009).

- ⁴¹ Ibid.
- ⁴² Ibid.
- ⁴³ Bazazi, A., et al. (2010).
- ⁴⁴ Ibid.
- ⁴⁵ Kim, D., et al. (2009).
- ⁴⁶ Maxwell, S., et al. (2006). Prescribing naloxone to actively injecting heroin users: a program to reduce heroin overdose deaths. *Journal of Addictive Diseases* 25.3: 89-96.
- ⁴⁷ Seal, K., et al. (2003).
- ⁴⁸ Davis, C., et al. (2013).
- ⁴⁹ Ibid.
- ⁵⁰ Davis, C., et al. (2013).
- ⁵¹ Ibid.
- ⁵² Davis, C., et al. (2015).
- ⁵³ Burris, S., et al. (2001). Legal aspects of providing naloxone to heroin users in the United States. *International Journal of Drug Policy* 12.3, 237-248.
- ⁵⁴ Ibid.
- ⁵⁵ CDC. (2015). "Opioid overdose prevention programs providing naloxone to laypersons – United States, 2015." *MMWR: Morbidity and Mortality Weekly Report* 64(23): 631-635.
- ⁵⁶ Beletsky, L., et al. (2007). Physician's knowledge of and willingness to prescribe naloxone to reverse accidental opiate overdose: Challenges and opportunities. *Journal of Urban Health*. 84(1): 126-136.
- ⁵⁷ Davis, C., et al. (2015).
- ⁵⁸ Ibid.
- ⁵⁹ CDC. (2015).
- ⁶⁰ Ibid.
- ⁶¹ Walley, A., et al. (2013). Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. *British Medical Journal* 346: 1-12.
- ⁶² Personal communication with Massachusetts Bureau of Substance Abuse Services staff, June 2014.
- ⁶³ Coffin, P. & Sullivan, S. (2013). Cost-effectiveness of distributing naloxone to heroin users for lay overdose reversal. *Annals of Internal Medicine* 158: 1-9.
- ⁶⁴ NASADAD. (2014). State substance abuse agencies, prescription drugs, and heroin abuse: Results from a NASADAD membership inquiry. Available at <http://nasadad.org/2014/10/state-substance-abuse-agencies-prescription-drugs-and-heroin-abuse-results-from-a-nasadad-membership-inquiry/>
- ⁶⁵ Wermeling, D. (2012). Considerations for development and marketing of needleless naloxone HCl delivery systems. PowerPoint presentation available at <http://www.fda.gov/downloads/Drugs/NewsEvents/UCM300876.pdf>.
- ⁶⁶ Thomas, K. (2012). Tiny lifesaver for a growing worry. The New York Times. Available at http://www.nytimes.com/2012/09/08/business/mylan-invests-in-epipen-as-child-allergies-increase.html?_r=0.
- ⁶⁷ Leonard-Segal, A. (2012). Naloxone expanded access: OTC status considerations for a nonprescription drug development program. PowerPoint presentation available at <http://www.fda.gov/downloads/Drugs/NewsEvents/UCM300875.pdf>.
- ⁶⁸ FDA. FDA approves new hand-held auto-injector to reverse opioid overdose. Press Release, April 2014. Available at <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm391465.htm>.
- ⁶⁹ FDA. Choosing a regulatory pathway for your drug: Citizen petition. Web Page. Available at http://www.accessdata.fda.gov/scripts/cder/training/OTC/topic5/topic5/da_01_05_0110.htm.