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## State Injury Programs' Response to the Opioid Epidemic: The Role of CDC's Core Violence and Injury Prevention Program

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### Abstract

The Centers for Disease Control and Prevention's (CDC's) Core Violence and Injury Prevention Program (Core) supports capacity of state violence and injury prevention programs to implement evidence-based interventions. Several Core-funded states prioritized prescription drug overdose (PDO) and leveraged their systems to identify and respond to the epidemic before specific PDO prevention funding was available through CDC. This article describes activities employed by Core-funded states early in the epidemic. Four case examples illustrate states' approaches within the context of their systems and partners. While Core funding is not sufficient to support a comprehensive PDO prevention program, having Core in place at the beginning of the emerging epidemic had critical implications for identifying the problem and developing systems that were later expanded as additional resources became available. Important components included staffing support to bolster programmatic and epidemiological capacity; diverse and collaborative partnerships; and use of surveillance and evidence-informed best practices to prioritize decision-making.

### Keywords

Core Violence and Injury Prevention Program; essential services of public health; prescription drug overdose prevention; public health infrastructure; state public health departments

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Strong public health infrastructure provides critical support for effective prevention strategies and lays the foundation required to carry out the basic responsibilities of public health (ie, the Essential Services of Public Health) and necessary functions of assessment, policy development, and assurance.<sup>1-4</sup> The organizational support and infrastructure for violence and injury prevention programs vary greatly by state and have historically been underfunded relative to the burden placed by intentional and unintentional injuries and deaths on society.<sup>5</sup>

The Centers for Disease Control and Prevention's (CDC's) Core Violence and Injury Prevention Program (Core), started in 1994 in response to a call for capacity-building injury prevention programs, supports organizational capacity building for state violence and injury prevention programs.<sup>6,7</sup> Core supports organizational capacity to bolster implementation of evidence-based population-level interventions and strategies.<sup>7</sup> Core aims to build capacity through infrastructure, surveillance, collaborations, programmatic and policy interventions, and evaluation in alignment with the essential public health services and functions (Figure). Funding is historically awarded on a competitive basis every 5 years.

## Core and Opioid Injury and Death Prevention

Until 2016, Core-funded states identified and prioritized their states' injury prevention focus areas rather than focusing on Core-required topic areas. Resultantly, several Core states identified and responded to the overdose epidemic early on, drawing attention through their injury surveillance to the role of prescription drugs, especially opioids, in rising rates of overdose deaths and hospitalizations. The purpose of this article is to provide an overview and description of the role of Core-funded states in identifying and responding to the prescription drug overdose (PDO) epidemic. We wish to emphasize the vital role of a supported and integrated public health infrastructure for successful identification and targeted intervention of emerging public health threats. We first briefly describe early successes related to opioid overdoses, prior to the 2011–2016 funding cycle, to illustrate historical Core funding elements that contributed to later successes during the 2011–2016 cycle, which we review in more detail. Case examples of 4 states (Colorado, North Carolina, Ohio, and Oregon) that leveraged Core resources for PDO prevention are presented to illustrate states' approaches within the context of their systems and partners.

## Pre-2011 PDO Prevention and Ties to Core

Adding surveillance case definitions for poisonings to the recommended injury indicators for state injury programs in 2001<sup>8</sup> fostered epidemiologic research of opioid-related injuries and deaths. In collaboration with Core and national public health organizations, injury epidemiologists met during regular surveillance meetings. During one such meeting, North Carolina's Core-funded epidemiologist raised concern about increasing unintentional poisoning deaths due to the misuse of prescription drugs in that state (Megan Davies, oral communication, February 10, 2017). Given this concern was raised prior to federal efforts to prevent opioid deaths, North Carolina's State Health Department requested and received short-term epidemiologic assistance through an Epi-Aid. Results revealed a 5-fold increase

in methadone-related deaths in North Carolina,<sup>9</sup> prompting state officials in 2002 to declare that drug poisoning rates had reached epidemic proportions.<sup>10</sup> Shortly thereafter, North Carolina's Secretary of the Department of Health and Human Services appointed a task force, which, in 2004, made recommendations for preventing unintentional drug overdose deaths.<sup>11</sup>

These regular surveillance meetings also contributed to 2 significant CDC reports in 2004. One demonstrated increasing hospitalizations and fatalities due to unintentional poisonings across 26 states.<sup>12</sup> The other reviewed drug overdose as the emerging leading cause of unintentional and undetermined poisoning deaths among US adults in 11 states.<sup>13</sup> Data from other states showed similar trends during this time,<sup>14–18</sup> and, in 2006, a CDC-authored article named PDO an epidemic as nationwide understanding increased around the role of prescription drugs in unintentional poisoning deaths.<sup>19</sup>

In 2008, unintentional poisoning became the leading cause of injury deaths in the United States,<sup>20</sup> and, by 2014, more persons died from drug overdoses than any previous year on record.<sup>21</sup> At this point, federal funding available for PDO prevention focused almost exclusively on substance abuse and mental health services and Prescription Drug Monitoring Program (PDMP) initiatives.<sup>22,23</sup> Support for state public health programs aimed at opioid overdose prevention was not available from CDC until 2015, when the Prescription Drug Overdose: Boost for State Prevention program funded 5 states.<sup>24</sup> As such, most state health departments relied on existing funding and resources to respond to the overdose epidemic until additional PDO prevention funding became available through CDC in 2015–2016 aimed at broader public health strategies. Until then, several states funded through the Core program prioritized PDO public health strategies as one of their focus areas.

## 2011–2016 Case Highlights

Core funded 20\* state health departments or their bona fide agents from 2011 to 2016. These programs were required to work closely with private, professional, academic, volunteer, and nonprofit injury and violence prevention organizations and partners through Injury Community Planning Groups to identify 4 priority focus areas with at least one that aligned with CDC's National Center for Injury Prevention and Control's priority areas.<sup>†</sup> Of the 20 awardees, 16 chose PDO as a focus area. These states further identified strategies and policies for PDO prevention based on the best available research evidence. PDO-related prevention strategies varied across the 16 states and were chosen on the basis of the context of the need and efforts occurring within each state. Examples of strategies chosen included convening key stakeholders and partners, improving prescriber participation in PDMPs, developing or improving PDMPs, improving clinical prescribing guidelines, educating prescribers on safe prescribing practices, analyzing data and disseminating findings to key stakeholders and policy makers, increasing public awareness and education about the risks

\*The 20 states funded through Core from 2011 to 2016 included **Arizona, Colorado, Florida, Hawaii, Kansas, Kentucky, Maryland, Massachusetts, Minnesota, Nebraska, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Tennessee, Utah, and Washington** (16 states in bold chose PDO/unintentional poisoning as a focus area).

†CDC's National Center for Injury Prevention and Control priority areas included motor vehicle-related injury prevention, prevention of violence against children and youth, prevention of PDO, and prevention of traumatic brain injury.

of prescription drug misuse, providing education about the proper disposal of prescription drugs, implementing and improving naloxone distribution programs, and implementing referral resources in health care settings. Program evaluation that occurred throughout the funding cycle is described elsewhere in this issue.<sup>25</sup> The remaining sections of this article highlight activities implemented in 4 Core funded states: Colorado, Ohio, Oregon, and North Carolina.

### Enhanced infrastructure

Core encourages design of prevention structures that integrate naturally (eg, encourage collaboration and partnerships with diverse topical and functional expertise) to efficiently and nimbly address emerging issues. Injury and violence activities vary widely in terms of structure, where they are located within agencies, and proximity to partners, which can significantly influence program outcomes.<sup>5</sup> Colorado's, Ohio's, Oregon's, and North Carolina's Core programs are located within their state health departments.

This organizational structure played an important role in Oregon's opioid response; Oregon's Core program is embedded within the mega-agency known as the Oregon Health Authority (OHA), providing structured access to diverse partners with areas of expertise adjacent to PDO, including implementation of the state Medicaid program, and providing alcohol and drug abuse prevention services, mental health services, and health systems analytics. Core leveraged this organizational structure to elevate PDO prevention and gain high-level support across the many programs housed within the OHA. Core staff coordinated and led an OHA opioid initiative in 2014 focused on PDO prevention strategies involving health systems, policy, and community-level interventions. Through coordinating activities, avoiding duplicate efforts, and careful collaboration, Oregon maximized its opioid misuse, abuse, and overdose resources. It created a state performance improvement measure to reduce overdose deaths, hospitalizations, and opioid misuse and also established metrics and prescribing thresholds for opioid use in chronic pain.

### Enhanced data and surveillance

Core activities also stress the importance of bolstering data and surveillance systems for monitoring injury and violence. Indeed, data and surveillance played an important role in each of the 4 states we highlight, allowing them to build momentum around PDO prevention and lending a population-level health perspective on the issue through investigations, reports,<sup>26–28</sup> and other activities.

Ohio's Core program utilized surveillance data to direct application of its efforts and resources. Surveillance data revealed that, from 2007 to 2012, the average crude unintentional drug overdose death rate in Scioto County was more than twice the state rate. Further analysis of state PDMP data showed that, in 2010, 9.7 million doses\* of prescription opioids were dispensed to 78 000 patients in Scioto County. Ohio targeted Scioto County, and other data-identified high burden areas, as intervention priorities.

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\*The term "doses" refers to the number of pills dispensed and does not include liquid doses or the strength of the dose.

Oregon's Core-funded injury epidemiologist identified a high correlation between the Oregon's retail supply of methadone and the increasing methadone overdose mortality rate, noting that, by 2006, most prescription opioid overdose deaths involved methadone. Widely sharing this information sparked several initiatives, including 2009 state legislation to establish a PDMP administered by the Core program, state action in 2010 to establish prior authorization requirements, and removing methadone as a preferred analgesic from the drug list formulary for state Medicaid recipients in 2014. The PDMP was implemented in 2011, and, by 2013, resulting data were being used by the Core program to analyze community-level prescribing practices related to hospitalizations and overdose deaths. These valuable data sparked a collaboration between the Core program and the Jackson County Health Department in 2013, both receiving Harold Rogers PDMP grants<sup>22</sup> to leverage epidemiologic resources for PDO prevention. From this, Core staff developed a Web-based, interactive data dashboard<sup>26</sup> used by local medical community action teams, pain guidance groups, and other stakeholders to track and assess local prescription and overdose burden.

Colorado's Core program used injury surveillance data to identify unintentional poisoning as one of 4 priorities in the Colorado Violence and Injury Prevention State Plan. In 2011, Core staff worked with the Colorado Injury Prevention Planning Group to review data from unintentional poisoning deaths, hospitalizations, and emergency department visits. The collaborative group specifically prioritized PDO prevention because opioid overdoses were driving statewide increases in unintentional poisoning hospitalizations and deaths. Because of the Core program's expertise with analyzing these data, high-level leaders within Colorado called upon them for data and education about best practices for policies and programs.

North Carolina's Core-funded Injury and Violence Prevention Branch applied for and received the enhanced Core Surveillance Quality Improvement project, separate component funding available to Core-funded states. This additional funding enabled collaboration with the CDC-funded Injury Control Research Center at University of North Carolina Chapel Hill to develop data dashboards for local health departments to monitor prescription drug-related emergency department visits in their counties. Analyses of fatal and nonfatal overdose data were used statewide in tracking, addressing, and evaluating the epidemic. The resulting Injury Epidemiology reports<sup>28</sup> helped inform state policy efforts. For example, surveillance findings demonstrating that more than 60% of opioid overdose deaths occurred before the arrival of emergency medical services (EMS) were shared with policy and decision makers, prompting North Carolina's Good Samaritan/Naloxone Access Law (enacted in 2013 and updated in 2015).

### **Enhanced collaboration**

Core states, including the 4 we highlight, were leaders in navigating PDO prevention in part because this public health problem was new and required forming new relationships or leveraging existing ones in a different way. Public health practice is labor-intensive and heavily dependent upon the public health work-force for successful operations.<sup>29</sup> Core funding averaged \$250 000 annually per state in 2011–2016 and supported less than 7 full-time equivalents (FTEs) total across the 4 states to coordinate all of the Core focus areas,

including PDO. These staff members provided critical capacity for convening stakeholders, leveraging resources, and leading initiatives to prioritize PDO in their states.

Several Colorado agencies were invested in reducing the state's high opioid death and hospitalization rates prior to 2011. However, these efforts were neither well-coordinated nor resulting in systematic implementation of well-known, effective prevention programs, strategies, or policies despite the state's ranking as second highest nationwide for prescription drug misuse. During the 2011 funding cycle, the Governor's Office invited Colorado's Core program to participate in the National Governor's Association Academy with other state agencies. Core staff played a significant role in creating the Colorado Plan to Reduce Prescription Drug Abuse,<sup>30</sup> which was initiated during the academy. During the planning process, Core staff provided CDC-recommended strategies, generated surveillance reports, created planning documents, managed logistics, and engaged more than 200 stakeholders by facilitating strategic planning sessions. As a result, stakeholders previously skeptical about the state's ability to reduce prescription drug misuse and overdoses began providing high-level support to implement multisector strategies to address the issue. Colorado Core staff also provided significant support and expertise to form the Colorado Consortium for Prescription Drug Abuse Prevention.<sup>31</sup> This group provides a statewide, interuniversity/interagency network and collaborative leads strategic plan implementation along with the Governor's Policy Office, various state agencies, and other public and private partners.

Oregon also leveraged Core-funded activities when invited to participate in the National Governor's Association Academy. The Oregon group attended in 2013 and included Core staff, a state legislator, the state pharmacy director, the state addictions program manager, a substance abuse prevention agency, and a nonprofit organization. They developed a 5-point plan that evolved into the conceptual foundation of Oregon's comprehensive approach to reducing opioid overdose, hospitalization, misuse, and use disorders. The Oregon Coalition for the Responsible Use of Medications, formed in 2014, is a nongovernmental coalition to move forward policy and practice solutions in partnership with the OHA.

North Carolina's Injury Community Planning Group, referred to as the Injury and Violence Prevention State Advisory Committee, played an important role in convening partners to collaborate on the state's PDO strategy. In 2009, the State Advisory Committee formed a new Poisoning Goal Team comprising a broad network of injury prevention practitioners, medical providers, partner agencies, and researchers. This group developed a portfolio on policy interventions used to educate policy makers, contributing to the state legislature enacting laws providing Good Samaritan protections for reporting overdoses, increasing access to naloxone, and improving the state's PDMP. In 2015, state law<sup>32</sup> mandated the North Carolina Department of Health and Human Services establish a Prescription Drug Abuse Advisory Committee, an expanded version of the Poisoning Goal Team that continues to coordinate statewide PDO prevention.

Following a symposium convened by the Ohio Department of Health, the Ohio Injury Prevention Partnership<sup>33</sup> (the state's Injury Community Planning Group) created the Prescription Drug Abuse Action Group (PDAAG), focused entirely on PDO prevention.<sup>34</sup>

This group provided education to various state and local officials about how misuse of prescription drugs was leading to overdose. The PDAAG developed a set of best practice policies for addressing the issue, many of which were later enacted by Ohio's legislature. In 2010, Ohio's then-governor established a state-level task force comprising coroners, mental health officials, pharmacy and medical board members, and others to review PDAAG's implementation recommendations. In addition, under the overarching Ohio Injury Prevention Plan, the PDAAG developed a strategic plan to address PDO deaths. This strategic plan included supportive activities for expanding community-based naloxone distribution programs, which were also supported by Ohio's Core program. To maintain opioid abuse prevention as a state priority, the current governor established the Governor's Cabinet Opiate Action Team (GCOAT).<sup>35</sup> The state's prescriber education workgroup, created by GCOAT, released 3 sets of prescribing guidelines: for pain management in emergency departments and acute care centers (2012); for chronic, nonterminal pain management in clinical settings (2013); and focusing on the management of acute pain outside of emergency departments (2016). Since release of the 2 earlier guidelines, from October 2013 to December 2015, the State Board of Pharmacy cites a 14.7% reduction in the number of prescription opioids dispensed with dosages greater than Ohio prescriber guidelines' threshold "trigger point" (ie, 80 mg of morphine equivalent daily).

### **Enhanced policy/program interventions**

Public health infrastructure is meant to facilitate effective interventions, whether programmatic or policy-level. The 4 highlighted states chose policy and program interventions befitting their context, informed by state data, collaborations, and infrastructure.

Ohio piloted Project DAWN (Death Avoided With Naloxone), an overdose education and naloxone distribution program, in Scioto County from 2012 to 2013. The program leveraged other funding to purchase naloxone and to develop program procedures. This pilot project was expanded over the Core funding period when additional state funds were allocated toward increasing the number sites; 3 sites were provided seed funding in 2014–2015. Ohio's Core program provided technical assistance to other sites interested in implementing Project DAWN, regardless of site participation in the pilot project. This project was expanded after the Core funding period when additional funds emerged to support 5 additional sites. As of December 2016, there were 53 Project DAWN sites operating in Ohio. Of the 39 Project DAWN sites with available data, 17 272 kits have been distributed with 1181 known overdose reversals. These outcomes are likely underestimated, as reporting of reversals by Project DAWN sites is voluntary.

Oregon prioritized advancing the plan developed through the National Governor's Association Academy through staff and leadership support. The Oregon Coalition for the Responsible Use of Medications convened 5 regional summits in 2015–2016 that were supported by Core staff. Attendance included representation from medicine, pharmacy, dentistry, behavioral health, addictions, law enforcement, education, tribal communities, and interested citizens. Goals included increasing PDMP enrollment and use, community connectivity and education about PDO, and developing regional plans to guide

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programmatically and policy interventions. Between 2011 and 2016, following these summits, access to Oregon's PDMP increased to 47% for prescribing providers and 36% for pharmacists. From 2011 to 2016, the rate of PDMP patient reports requested by users increased from 71 per individual to 81 per individual. In 2016, the rate of prescribing decreased for most controlled substances, including an 11.2% decrease for hydrocodone and 6.7% for oxycodone compared with the same period in 2015. In addition, Oregon's Core program provided information and education regarding best practice policies being considered by state decision makers. In 2013, legislation passed to create a naloxone rescue program, including a Good Samaritan law. In 2015, the legislature passed bills allowing pharmacists to both prescribe and dispense naloxone and required integration of Oregon health information exchanges with the naloxone program.

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North Carolina focused on effective implementation of its Good Samaritan/Naloxone Access Law. Its intent is providing naloxone to those at greatest risk during an overdose episode. Among other approaches, this law enabled naloxone to be prescribed under medical standing orders and to third parties. Numerous North Carolina agencies, partners, and stakeholders worked to ensure the regulatory policies and practices were in place to effectively implement the law. Core funding supported education about the benefits of naloxone access. Staff educated community individuals and family members about overdose prevention and offered naloxone training to health care, public health, behavioral health, and EMS providers. North Carolina mobilized what became the largest statewide naloxone program in the country, reporting the distribution of 38 000 free overdose rescue kits and 6022 confirmed overdose rescues as of February 13, 2017.<sup>36</sup> In addition, the state EMS medical director issued a model EMS standing order for naloxone, enabling EMS medical directors to authorize law enforcement and first responders to be trained and equipped with naloxone. As of October 2016, a total of 140 law enforcement agencies in North Carolina carry naloxone and have reported 231 overdose reversals.<sup>37</sup> Core-funded staff assisted in developing a tool kit for local health departments in creating and developing their own naloxone program,<sup>38</sup> which was later adopted for school use in developing naloxone policies.

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Since the Colorado Consortium for Prescription Drug Abuse Prevention's<sup>31</sup> inception, Core-funded staff have been integral to the ongoing implementation of prescription drug abuse and overdose prevention strategies. These staff educated consortium members and the PDMP task force on related best practices. In 2014, the state legislature made significant policy and systems changes to reduce prescription drug misuse, diversion, and overdose by passing a bill that aligned Colorado's PDMP with best practice strategies, relying on model policies provided by consortium members. Strategies included delegated access, unsolicited reports, mandated enrollment, access by out-of-state pharmacists, and access to PDMP data as a public health surveillance tool. The Board of Pharmacy reduced PDMP data collection intervals on dispensed opioids to daily uploads and partnered with the Colorado Dental Board, Colorado Medical Board, and State Board of Nursing to adopt a policy for prescribing and dispensing opioids.



## Limitations

Public health systems are difficult to categorize for comparison across jurisdictions.<sup>39</sup> The findings within this descriptive article do not lend themselves to numerical representation, nor should be generalized across programs. Instead, the article highlights contributions of state injury programs, augmented through CDC's Core, in identifying and responding to the PDO epidemic. These highlighted examples offer a glimpse of the applied field experience as a "lived reality" within the context of state health departments where programs are often tasked with leveraging funding, partnerships, and other resources to implement programmatic strategies and policy interventions aimed at preventing disease and injury.

## Discussion

Building injury and violence prevention program capacity through infrastructure, surveillance, evaluation, collaboration, and programmatic and policy interventions was vital for states' identification of and response to the PDO epidemic. The Core program encourages state injury programs to build and enhance their infrastructure, data and surveillance systems, collaborations, and programmatic/policy initiatives. The state examples we highlighted demonstrate how Core programs mobilized to leverage these systems for emerging injury prevention, in this case PDO, through providing leadership and support to other local, state, federal, and nonprofit initiatives. While insufficient for supporting comprehensive PDO prevention programs, Core's support allowed states to use surveillance and data to inform stakeholders and partners about the epidemic, to build PDO prevention expertise at the state level, to ensure that state resources were allocated efficiently on the basis of epidemiologic data and evidence-informed practices, and to sustain program and policy interventions started through Core by leveraging additional resources.

Beyond programmatic success, due to their bolstered infrastructure and ability to tackle the burgeoning PDO epidemic, Core states were competitive in seeking other sources of funding to leverage additional projects. For example, CDC's Prescription Drug Overdose Prevention for States (PfS) program initially funded 16 states at the intersection of PDO burden and state response readiness.<sup>24</sup> Eleven of these 16 originally funded PfS states were Core programs from 2011 to 2016. In addition, the 4 states highlighted earlier led and supported efforts to apply for PDO-related funding made available through significant federal investment in 2015. In total, they successfully leveraged an additional \$32 243 646 for PDO prevention in their states. This amount is likely under-represented because it excludes successful funding applications the states supported for external partners. This leveraged funding is impressive considering only efforts from 4 of 16 Core states with opioid-related activities from the funding cycle are highlighted.

The Institute of Medicine has recommended strengthening state infrastructure in injury prevention by developing prevention programs in states' department of health and providing them with funding, resources, and technical assistance.<sup>3</sup> However, injury and violence prevention funding is limited. Fortunately, Core helps fill this concerning gap. Unfortunately, Core funding does not reach all 50 states or to additional territories, tribes, or jurisdictions, although Core lends support to all states regardless of funding status through

regional networks and technical assistance from CDC staff. For example, CDC Core staff, in collaboration with the Council of State and Territorial Epidemiologists, developed a Special Emphasis Report template for PDO that several funded and unfunded states customized, using their individual data, to bring attention and awareness to stakeholders about the epidemic.<sup>40–42</sup>

Previous studies have shown that loss of funding limits program continuity, even if programs continue operating at reduced capacity.<sup>43</sup> The state examples highlighted in this article illustrate the time and effort involved to initiate programs and policies once problems are identified. In the case of North Carolina, it had achieved great success in identifying the problem early on and in creating recommendations for moving forward with PDO prevention initiatives but was unsuccessful in a highly competitive application process for Core funding during the 2005–2010 funding cycle. The loss of staff and capacity hindered a broad coordinated prevention response to the emerging opioid epidemic, and it was not until 2011 that it received a capacity boost again after successfully applying for Core funding. Funding loss can result in infrastructure limitations, reduced capacity to communicate widely to partners, shifted priorities, and challenges in providing training and technical assistance to partners.<sup>43</sup> In 2015, 7 states reported budget cuts in injury and violence prevention programs that adversely affected their ability to support partners, staff, surveillance, and services, leading to some program elimination.<sup>5</sup>

Surveillance is an essential element of the public health function of assessment.<sup>44</sup> In the 4 states highlighted in this article, Core funding supported less than 1 full-time epidemiologist per state, yet data and surveillance played a critical role in identifying increasing rates of unintentional poisonings and served as the impetus for state injury program's involvement in PDO-related prevention activities. Other emergent public health responses have underscored the critical role that surveillance has in detecting and responding to emerging public health problems.<sup>45</sup> Since 2009, access to data professionals (eg, epidemiologist, statistician) has decreased in state injury and violence prevention programs; however, Core-funded states report greater average numbers of FTEs (2.5 FTEs) than states not funded by Core (0.86 FTEs).<sup>5</sup>

## Conclusion

The 4 states reviewed here each created a unique programmatic response reflective of the state's context, strengths, and needs. Each state demonstrated leadership in developing systems to prevent opioid misuse and overdose deaths through successful overdose reversals, changing prescribing behaviors, and spurring action informed by data.

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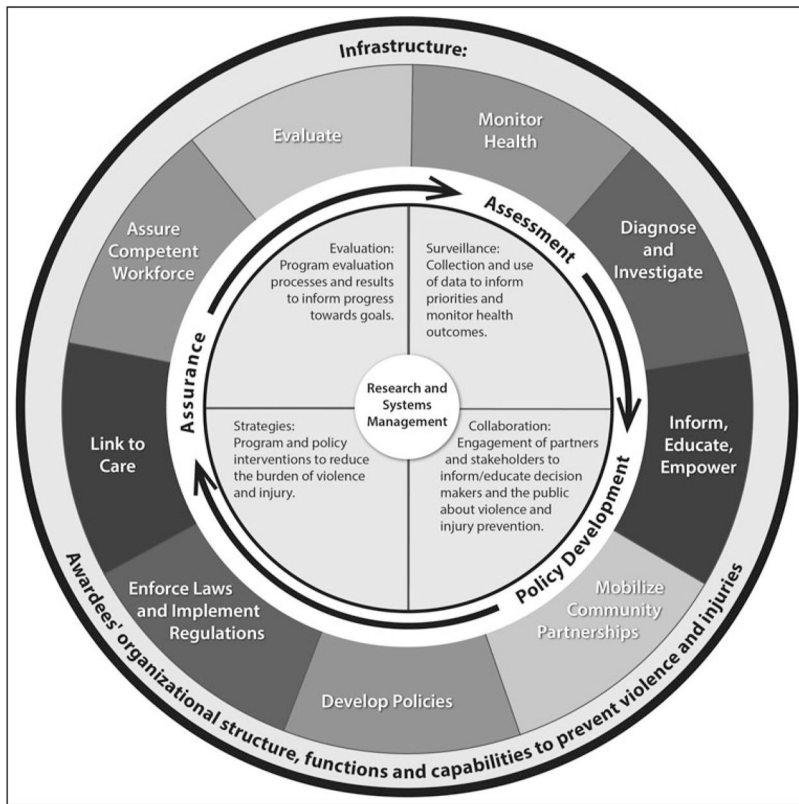
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### Implications for Policy & Practice

- Coordination is enhanced with funded staff who can help leverage resources and maintain focus on priority areas.
- Health systems may increase their efficiency through integrated structures that foster interdisciplinary collaboration among diverse partners with expertise in functional and topical areas. Notable relationships include injury community planning groups required by the Core Program with representation of medical partners including emergency and first responders, public health partners, researchers, public safety, and citizens, among others.
- Surveillance helps direct resources to areas of the greatest burden, helping more efficiently target limited resources to high burden areas. In addition, data allow the identification of linkages between outcomes and relevant factors, which can inform appropriate interventions and policy changes.
- Impact may be achieved through supporting/expanding existing programs (eg, Project DAWN), obtaining diverse perspectives for leveraging policy and program best practices (eg, Oregon Coalition for the Responsible Use of Medications), connections between practitioners and policy makers (eg, Good Samaritan/Naloxone Access Law), or training opportunities for staff (eg, Colorado Consortium for Prescription Drug Abuse Prevention).



**FIGURE.** Core Aims Aligned With the Essential Public Health Services and Functions<sup>a</sup>  
<sup>a</sup>Adapted from the Essential Services of Public Health.<sup>4</sup>