



Bureau of Justice Assistance (BJA)-Supported
Comprehensive Opioid, Stimulant, and Substance Abuse Program (COSSAP)

Data-Driven Strategies

Data Sharing to Address Current and Emerging Drug Threats: Pueblo County, Colorado

The Pueblo Department of Public Health and Environment (PDPHE) is one of six local communities funded by the Bureau of Justice Assistance Partnership for Data-Driven Responses Demonstration Project. One of PDPHE's core project activities was to create a robust, near real-time, and regular data collection and sharing infrastructure for public safety, public health, and behavioral health partners. This publication outlines the implementation of this activity.

Strong partnerships and trust are essential for data sharing. The foundation for PDPHE's Partnership grant was laid by the Substance Use Response Ecosystem (SURE). Initiated in 2017, this community collaboration among health, safety, emergency services, human services, and other community partners serves as the stakeholder workgroup for the PDPHE grant.

Pueblo County's Law Enforcement Assisted Diversion (LEAD) program influenced the structure of the PDPHE Executive Committee (EC), which was established through individual outreach to agency leadership. At the first EC meeting, members were asked to share how substance use impacts their organizations and their visions for the committee, which helped forge a bond among committee members. Each agency's leadership was also asked to designate a data representative from its organization for the project to help ensure buy-in and that the right person was included in the data-focused group. The data pod was further broken

down into subgroups (Health, Safety, Human, and Community Services) to specify analyses.

During the initial project planning period, the data pod analyzed available data and provided visualizations to the stakeholder group and executive committee, which ultimately identified expanding data collection and sharing as a key implementation activity.

Partnerships Demonstration Project

The goal of the Partnership project is to facilitate collaborative analysis of local and state public health and safety data that support targeted implementation of public health, public safety, and behavioral health strategies that prevent and reduce overdose deaths. Grantees are required to form organizational structures to support cross-sector collaboration, including an executive leadership group, a data-focused group, and a stakeholder group to guide data analysis and prioritize responses.

Research Questions and Measures

PDPHE and project partners developed a problem statement and research questions to guide the data sharing activity. The research questions were kept broad to ensure that they covered the scope of the grant, but also flexible enough to allow for activities to shift if new trends emerged. Ultimately, the team identified three core research questions:

- What are current and emerging drug threats in Pueblo County?
- What sectors encounter current and emerging drug threats?
- How are sectors managing these threats?

Selecting the measures was a multistep process. The SURE Coalition developed an initial wish list of data measures that was discussed among the full data pod team. Each data pod sector (Safety, Health, Harm Reduction, Schools, and Children) then took a deeper dive into the wish list to assess the availability and feasibility of generating these data. This analysis resulted in a condensed list of measures which was reviewed for outcomes and significance. Information was then compiled into a measure matrix. The full data pod was convened for a final review to ensure that everyone understood the data collection plan across all sectors. The meeting also provided the opportunity for additional discussion and to formalize formatting.

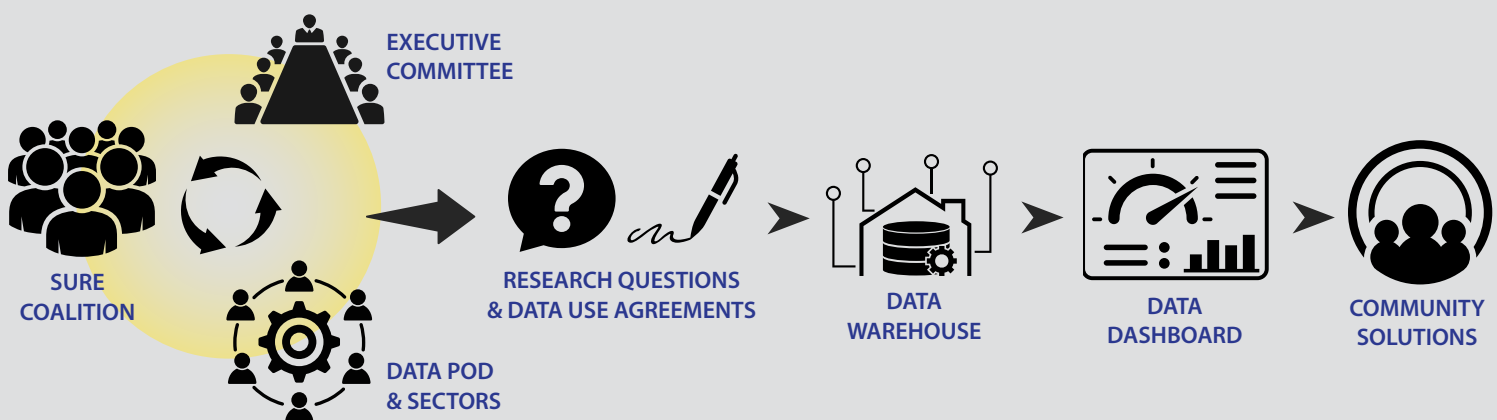
Software Selection Process

All program partners provided input into the software selection. The data leads from the key contributing agencies met to discuss key considerations for their agencies, including data security, HIPAA, data needs, and recommendations for software and visualizations. Each agency also prepared a data profile on its current system that specified measures, data format, export preferences, capacity of historical data, and agency constraints. PDPHE scheduled four software demonstrations, followed by debriefs with partners to discuss the pros and cons of each system. This information, as well as cost and sustainability considerations, were used to select the software. The software was selected before the data sharing agreements were finalized so that system specs and processes could be incorporated into the agreements.

Software Selection Tip

Having each data sharing agency complete a profile on its data system made the process of selecting the software fair and transparent.

Framework for Pueblo's Data Sharing Strategy



Data-Sharing Agreements

After researching different types of data agreements, PDPHE developed a data sharing template and an addendum. The addendum allowed each agreement to tailor the data measures, reporting time frames, submission deadlines, and other specifics of each partner agency. Addressing privacy considerations and ensuring that partners felt in control of their data was critical to implementing the public dashboard. For example, one partner's addendum specified that the agency would be given an opportunity to review and approve dashboard visuals that included its data.

Collecting Data

After the majority of data sharing agreements were executed, partners began contributing data monthly. To organize the data submissions, a separate email was set up to reduce the likelihood of missed submissions. Data is also uploaded into SharePoint and saved to a thumb drive at the end of each month, which serves as a backup.

To ensure regular submissions, reminder emails are sent to data pod partners at the beginning of each month, with a follow-up email for submission lags. All data submissions are tracked by month, sector, and agency, and trends are monitored to determine whether interventions or support are needed. PDPHE staff members manage and clean data submissions, as well as prepare data visualizations described in the next section.

Dashboard Data Visualizations

To determine which data would be shared on the dashboard, PDPHE prepared initial visualizations and converted these to PowerPoint slides to share with partner groups (data pod, SURE Coalition, and the Executive Committee). These discussions helped refine the views, select the appropriate formats, and bring the data elements to a digestible size.

Internal Dashboard

To easily share and review data with partner groups, PDPHE developed an internal dashboard. The intention of the dashboard was to identify a set of meaningful measures that would illustrate trends moving in positive or negative directions. The initial proposed measures and benchmarks were informed by research on common measures used by state and city dashboards. Dashboard data tabs include arrests, overdose calls, overdose deaths, and drugs related to overdose deaths, health-related services and drug screenings, Narcan or Naloxone administration, and prescription drug use. The internal dashboard is housed at PDPHE and updated on a monthly basis. Partners who have Tableau reader can access the information; otherwise, they receive PowerPoint slides.

External Dashboard

PDPHE is in the process of developing an external dashboard. Because some of the data on the internal dashboard may not be appropriate for sharing, the data pod met to identify potential issues. Data considerations identified by the group include the following:

Substance Use Dashboards Models

Below is a sample of dashboards Pueblo County used to inform its design.

- <http://cchi.web.unc.edu/opioid-dashboards/>
- <https://injuryfreenc.shinyapps.io/OpioidActionPlan/>
- <https://preventoverdoseri.org/see-the-data/>
- <https://www.in.gov/mph/930.htm>
- <https://skylab.cdph.ca.gov/ODdash/>
- <https://www.health.state.mn.us/communities/opioids/opioid-dashboard/index.html>

- **Data Privacy:** Some data on the internal dashboard was connected to patient/client IDs. Edits were needed to ensure that data was de-identified.
- **Geographic Bias:** The internal dashboard includes ZIP codes. There was some concern that publishing data by ZIP code might stigmatize certain locations; therefore, this information was removed.
- **Explanations:** Partners found it important that an external dashboard include a narrative that both contextualizes published data and provides narrative explanation to help community partners and the public properly interpret the data.

Once the external dashboard met the expectations and requirements of the project partners and PDPHE, the data was cleared and uploaded to Tableau Public. It is linked to the PDPHE website and updated monthly.

Next Steps

Data shared on the dashboard will be used as a jumping-off point for deeper dives into subsets of the data to illuminate what is occurring throughout the community and highlight barriers, identify emerging or existing threats, and present opportunities for action. The project also plans to expand the data measures to additional areas of concern, such as marijuana use. Based on the success of this dashboard, it will also serve as a template for additional public health dashboards. Finally, PDPHE plans to publicize the data dashboard through community partners, as well as social media.



Visit the dashboard at: <https://county.pueblo.org/public-health/substance-use-data-pueblo-county>

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