

Poisoning Risk Reduction Through Improved Community-based Rx Disposal

Phoenix Area Injury Prevention Program

Division of Environmental Health Services

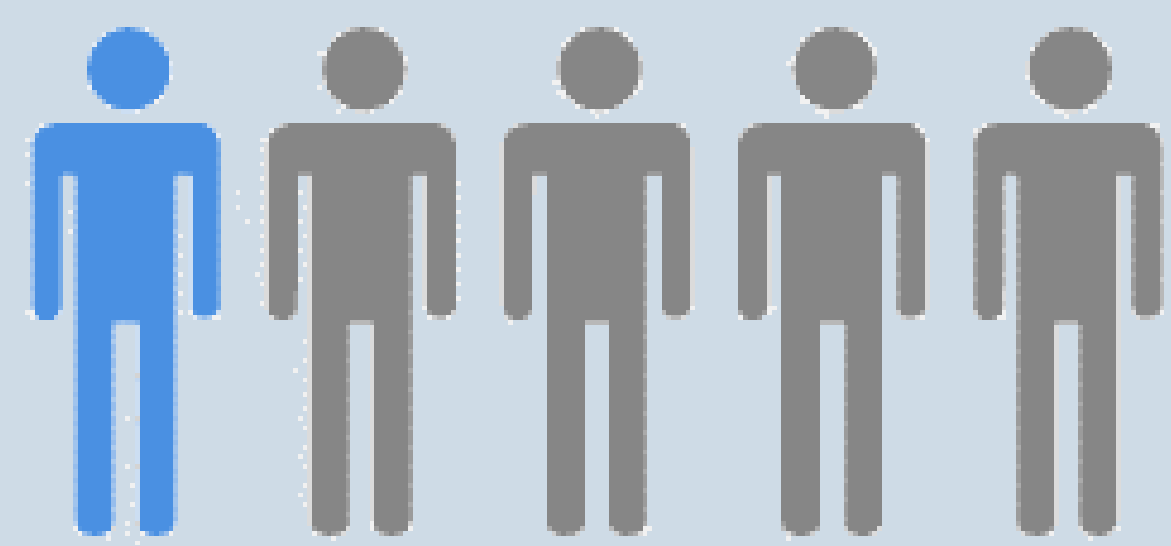


Background

According to the most recent CDC National Center for Health Statistics Report, 130 Americans die each day from an Opioid overdose. Prescription medications permitted to accumulate in the home environment represents potential increased risk for both diversion and overdose. An article¹ published in JAMA found more than 90 percent of individuals failed to dispose of leftover prescription medications in recommended ways.

To learn more about the prescription medication disposal practices in the Phoenix Area, the Injury Prevention Program interviewed 55 elders from nine tribal communities.

Interview Results:



Only 1 out of 5 disposed of Rx meds correctly

73%

73% are prescribed pain killers

Thirty-One Percent

31% reported previous lost/misplaced meds



1. Johns Hopkins Medicine. "Most prescribed opioid pills go unused, study confirms: Most are improperly stored, as well." ScienceDaily. ScienceDaily, 2 August 2017

METHODS

Goals

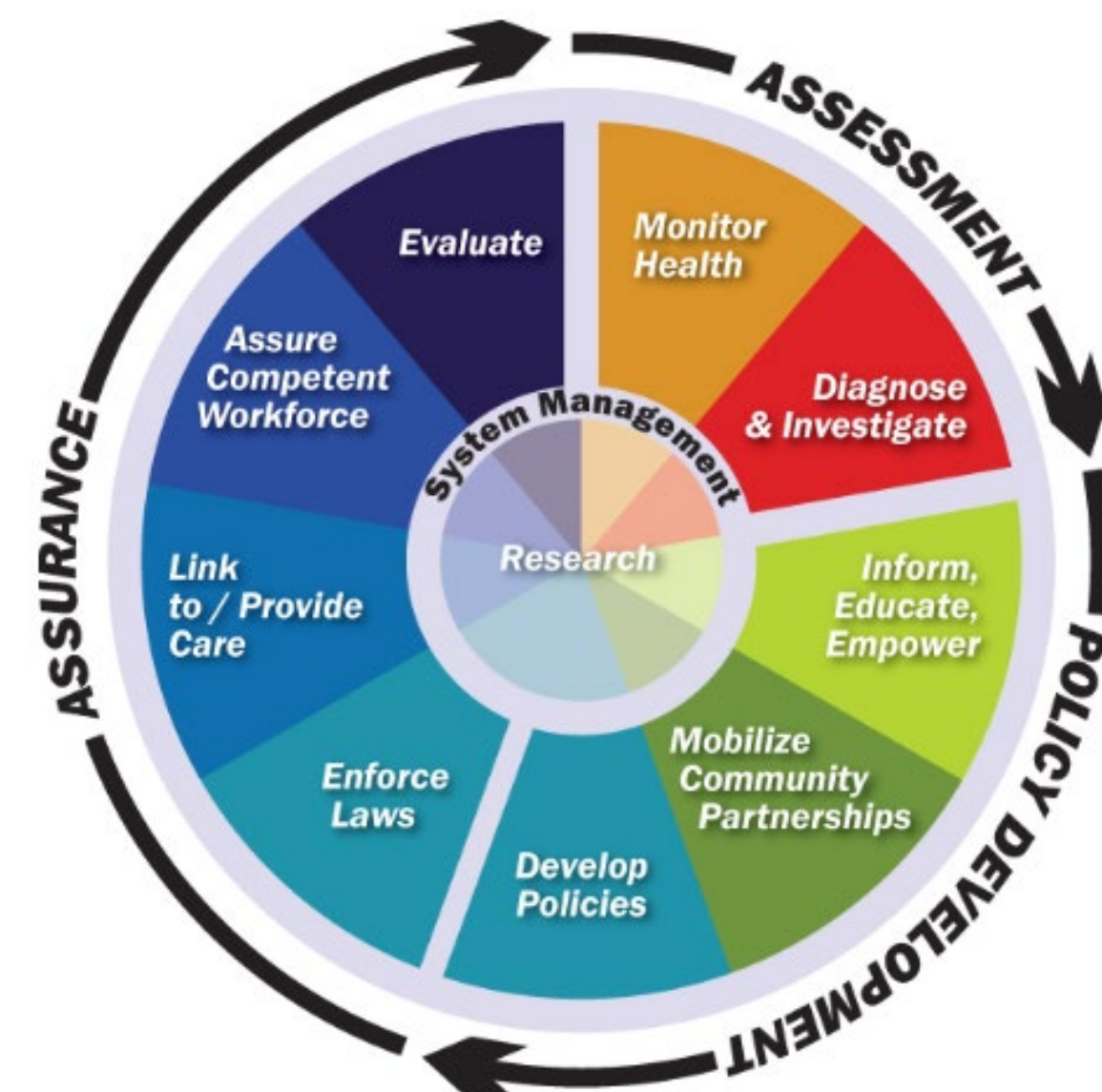
To help address the alarming results from the survey and other feedback, the program developed a plan intended to achieve:

- Increased awareness of disposal methods,
- Increased availability of disposal equipment and materials,
- Increased community-based partnerships, and
- Decreased unused or expired medications in the home environment.

The Plan

- 1 – Determine disposal knowledge, attitudes, and behaviors
EPHS # 2-Diagnose and investigate health problems and health hazards in the community
- 2 – Educate on available disposal options and proper procedures
EPHS # 3- Inform, educate, and empower people about health issues
- 3 – Determine new or improved options to increase the disposal of unused or expired medications
EPHS # 10- Research for new insights and innovative solutions to health problems
- 4 – Establish partnerships with state and local health programs to connect tribes with disposal equipment and material
EPHS #7- Link people to needed personal health services and assure the provision of health care when otherwise unavailable
- 5 – Partner with community-based health programs to design and implement new or improved Rx disposal processes
EPHS #4- Mobilize community partnerships and action to identify and solve health problems
EPHS #5- Develop policies and plans that support individual and community health efforts
- 6 – Design and distribute program evaluation tools for the new or improved processes.
EPHS #9- Evaluate effectiveness, accessibility, and quality of personal and population-based health services

EPHS = Essential Public Health Service



RESULTS

The program developed several partnerships between tribes and state and local health programs to implement pilot interventions based on the interview feedback.

Drug de-activation pouches

When used properly, medications can be disposed of safely in the clinic or home environment using de-activation pouches. Medications can be placed into these pouches with warm water and then discarded in the domestic trash. The pouches use water activated carbon powder that neutralizes the medications and makes the contents environmentally friendly to dispose of in the domestic waste stream. Through state partnerships, over **1,700 pouches** have been obtained for tribes.



Over 860 prescription medications have been voluntarily disposed of in the home environment from four communities.

Medication drop boxes

These drop boxes are collection receptacles with pre-paid ship-back liners designed for DEA licensed facilities. Patients can drop their expired or unused medications into these boxes similar to a mail box. Three facilities have installed drop boxes.



750 lbs.

Over 750 lbs. of prescription medications have been deposited in drop boxes in three communities

DISCUSSION

Program costs

There are many variations of the products used for this project available through GSA or open market.



Drug de-activation pouches can typically be purchased for \$10 ea. One large pouch can deactivate ~90 pills.



Medication drop boxes can be purchased through GSA. The average start-up cost is ~\$1500. The annual maintenance costs, which includes shipping and disposal of discarded medications is ~\$300-\$500 per year.

Conclusions

We have seen a great response from our tribal communities interested in learning more about the various methods to improve safe medication disposal. This project delivered a heightened awareness of medication disposal options to community-based health workers and those they serve.

Next Steps

We are continuing to expand the partnerships to build on early successes in Arizona and Nevada as we work with California and Utah public health programs to extend our outreach to more tribal communities in need.

ACKNOWLEDGEMENTS

This project was implemented and evaluated through the efforts of several partners that include:

- Tribal and IHS pharmacies
- Public Health Nursing
- Community Health Representatives
- AZ & NV State Health Departments
- IHS Division of Environmental Health Services staff

