

**INDIAN HEALTH SERVICE  
2021 RICK SMITH INJURY PREVENTION AWARD**

**MEDICATION DISPOSAL TEAM**

Phoenix Area, Bemidji Area, Oklahoma City Area

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As the leading cause of injury-related death, drug overdose claimed the lives of more than 70,000 individuals nationally in 2019. The impact of prescription drug abuse/misuse has been felt across all racial and ethnic groups; however, American Indian/Alaskan Natives (AI/AN) have felt the magnitude of the crisis. In 2018, AI/AN population had the second-highest drug overdose death rate (14.2 deaths/100,000 people) in the United States. Published literature suggests medication left unsecured in the home contributes to an increased risk of intentional medication abuse, theft, diversion by individuals and unintentional poisoning due to ingestion by small children or pets.

Due to the remote setting of many tribal communities, stockpiling medications in the home environment or improperly discarding them the trash or toilet often takes place. From a previous project survey conducted by the Phoenix Area Injury Prevention Program, only one out of every five individuals who had been prescribed medications disposed of them properly or knew of other options for disposal.

Due to limited literature on barriers and access to proper medication disposal, the IHS Medication Disposal Team introduced two innovative strategies for the home environment and in community:

**Drug Deactivation Bags (Home)**

- Acquired bags that deactivate medications to safely dispose of them in the domestic trash
- Created an educational flier for community partners distribute to promote participation and provide step-by-step instructions on use of deactivation bags.
- Created a data collection form for use to gather: patient's age and quantity of unused/expired medication (whether pills, patches, liquid or other); quantity and medication type being disposed; reason for disposal (i.e., discontinued, expired, unused, or other); and if the medication was prescribed for pain relief.

**Drop Box (Community)**

- Facilitated the acquisition of medication drop boxes that are stainless-steel collection boxes with the capacity to hold 18 to 36 gallons; secured to the floor and include a removable, prepaid liner that when full are returned to the vendor to undergo proper destruction for medication disposal.
- Assessments revealed IHS and tribally operated healthcare facilities were not aware of the DEA requirements that allowed health care facilities/pharmacies to have a drop box

serve as a collection site. The team worked with pharmacists and healthcare facility leadership to provide awareness and assistance in the installation of community medication drop boxes.

- A flier was created and provided to key partners highlighting the importance of the medication drop box, benefits to the community and the facility, and the identified DEA requirements for collection sites. In addition, a centralized tracking spreadsheet was developed to analyze disposal data made available by the manufacturer through an on-line portal.

## **Supporting Data**

### **Drug Deactivation Bags**

- Distributed 215 drug deactivation bags to 162 community households in six Phoenix Area tribes in a three month period. The bags neutralized 8,011 pills, 777 milliliters (mL) of liquid, and eight medicated dermal patches.
- Eighty-five percent (n=137) of households reported “Yes” that they were disposing of prescription pain medication, while 12% (n=20) reported “No” to disposing of pain medication; and 3% (n=5) reported, “Didn't Know” if they were disposing of pain medication

### **Drop Boxes**

- Collaborated with two other IHS areas (Bemidji and OKC) from October 1, 2018, to September 30, 2020 to evaluate data collected from 34 drop boxes located in 29 healthcare facilities. A total of 4,684 pounds of medication were collected and disposed of through healthcare facility drop boxes. Ninety percent of the boxes were located in rural settings.
- In the Phoenix Area, nine (9) additional drop boxes were added as a result of the project.
- Increased visibility and awareness via publications in three peer-reviewed journals and presentations at five national/regional conferences.
- Disposal efforts cited as part of IHS "Best and Promising Practices" for safe community medication disposal.

Through collaborative efforts, the Medication Disposal Team utilized an applied public health approach to raise awareness, provide education and improve prescription drug disposal practices by pilot testing two innovative drug disposal systems. Three Area IP programs worked to facilitate the Drop Box project and produce a manuscript for publication. The Team facilitated a community-based drug deactivation project with assistance from community partners. In addition, they received 1,700 drug deactivation bags for distribution at no cost to IHS and participating tribes through partnerships with state entities.