



# County of San Diego

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2010 Submission for CCDEH  
Excellence in Environmental Health Award

## County of San Diego, Department of Environmental Health **Safe & Accessible Home-Generated Sharps Collection Program**

### **Overview**

In response to a new California law which went into effect in September 2008 and prohibited home-generated sharps from landfill disposal, the County of San Diego Department of Environmental Health Household Hazardous Waste Program established eight(8) residential sharps collection “kiosks” in unincorporated communities.

Innovative partnerships were created with the County Sheriff Department and a local Fire Department to host the kiosks, which, not only minimized the risk of vandalism to the kiosks, but also allowed residents to feel safe while properly disposing of their sharps. This program has increased the proper collection of home generated sharps waste from residents of unincorporated areas significantly by allowing for convenient access to free and safe disposal options seven days a week.

### **Background**

According to EPA statistics, one out of every 12 households includes someone who uses hypodermic needles and syringes. The majority of used needles have historically ended up in the solid waste system where they pose a health risk to anyone encountering them through the course of their work, or through spills, or other accidents. Used needles can transmit numerous blood-borne pathogens.

Improperly disposed sharps present a health risk to solid waste workers and maintenance staff. In addition, sharps that are carelessly discarded in public places, such as parks, beaches, or schoolyards can put children, pets, and others at risk for accidental disease exposure requiring expensive testing, treatment, and follow-up. Establishing convenient collection points is an important public health consideration to prevent needle-stick injuries and exposure to disease-causing pathogens. Because of these risks, the State of California passed legislation that banned landfill disposal of sharps effective in 2008.

*"Environmental and public health through leadership, partnership and science"*

The service area for the County's HHW program is the unincorporated area of San Diego County. Based on population of the unincorporated areas, it is estimated, that approximately 13,000 households in the service area generate sharps waste from the treatment of medical conditions. In addition, because many of the outlying unincorporated communities are rural, residents of those communities are more likely to inject their own livestock and pets with vaccines or medications as needed, adding to the importance of proper disposal options.

Although the existing Permanent HHW Collection Facilities (PHHWCF) provide a sharps disposal option to residents in all unincorporated areas of the county, distance and limited operating hours prevent many residents from taking advantage of this service. Indeed, residents of the County have often expressed frustration about the inconvenience of disposal at a PHHWCF.

Additionally, from previous sharps collection projects, the County has observed the need for permanent disposal options in the remote communities. In 2005, the High Desert Family Medicine Clinic in Jacumba (a community of just over 600 people) distributed 60 mail-back containers to diabetic patients in a few months. Staff at the Jacumba clinic estimated that over 50% of the patients they see have diabetes and are in need of ongoing sharps disposal options.

In order to address the need for proper sharps disposal opportunities in the unincorporated areas, the County Department of Environmental Health Household Hazardous Waste (HHW) program applied for and received a competitive grant from CalRecycle (formerly the California Integrated Waste Management Board) in 2008.

### **Project Description**

Utilizing the funding from CalRecycle the HHW program initiated the Sharps Kiosk program with the primary goal of increasing rates of sharps collection from outlying, underserved communities. As a secondary goal, it became clear that the security of these locations as well as user comfort level were important considerations in protecting public health and encouraging participation.

Based on our grant request, funding was made available to purchase eight kiosk units. Target communities were originally selected based on a variety of factors including:

- Population demographics (elderly populations having higher incidences of illnesses such as diabetes requiring self-injection of medications).
- Distance to existing sharps disposal opportunities such as Household Hazardous Waste Collection facilities.
- Availability of appropriate sites for placing the kiosks.

The original intention was to site the sharps kiosks primarily at pharmacies, medical clinics or feed stores; however, there were a number of obstacles at each of these sites including security and liability issues. In determining the most appropriate sites for the kiosks, it became evident that a partnership with a public safety agency would be ideal. As a County agency, the Sheriff Department was the perfect partner with stations and substations located throughout San Diego County.

The Department of Environmental Health engaged the Sheriff Department in the project, and as a result sited seven of the eight kiosks at Sheriff substations. A final kiosk was installed at a Lakeside Fire Station due to the accessibility of the site and the great support that was garnered from the

Lakeside Fire Department. The kiosks were purchased and installed between December 2008 and February 2009.

The Sheriff substations and Fire Station serve as secure locations with convenient access for the public and can be monitored more easily by County staff than privately-owned sites. All of the Sheriff Station locations are accessible by the public seven days a week, 24 hours a day. The Fire Station kiosk is located inside the station yard and is available seven days a week from dawn to dusk. (See map attached for locations of kiosks). This level of accessibility provides convenience as well as privacy to residents disposing of their sharps waste while at the same time deterring potential vandals.

The inherent risks of collecting and storing sharps made safety one of the key issues for this project. Similar to a mailbox, the selected kiosks are constructed of heavy-gauge steel and are resistant to weather and tampering (see attached photos of kiosk). The canti-levered shoot is designed to accept containers up to one-liter in size, yet prevents a person from reaching into the unit. The sharps are collected in a 7.5-gallon bio-hazard bucket, which holds approximately 3,000 syringes. The collection contractor has regularly scheduled pickups at the high use sites, and schedules pickups at the two most remote sites (Julian and Campo) on an “as-needed” basis. The usage at each kiosk is recorded in order to continually evaluate the success of the program and/or the need to relocate the kiosks.

To promote the program, the County actively advertised the sites and proper sharps disposal in a variety of printed media (see sample ad attached). In addition, the County Television Network produced a short information piece for their news program “County Chronicles” to help get the word out about the new sharps drop off kiosks. The video of the program is available at: <http://www.youtube.com/user/countysandiego#p/search/0/SjcKM0DNVVA> . As an added incentive for residents to manage sharps correctly, individual sharps containers are distributed at locations within the targeted communities such as medical facilities, feed stores, and pharmacies as well as at community health fairs. These containers can be used to safely transport the sharps for disposal.

### **Outcomes**

While initial use of the kiosks was slow and sporadic, the corresponding comprehensive outreach campaign led to a significant increase in collections at these sites in the past year. Starting January 2009 through April 2010, 828 pounds of sharps have been collected from the kiosks. An average of 10 pounds of sharps is collected by the contractor with each site pick up. The sites that are most heavily used tend to be the communities with the highest population centers such as Fallbrook and Lakeside with the exception of Borrego Springs. The Borrego Springs community is approximately 90 miles east of the City of San Diego and has a very high density of elderly residents (25% over age 65 compared to 11.5% in the region). Consistent with elderly demographics, there are a high number of residents with diabetes. Establishing a sharps disposal opportunity conveniently available to this isolated population has been a very positive outcome of this project. Please see Table 1 for information on pounds collected from each site.

*Table 1: Sharps Collections at County Sharps Kiosk sites (January 2009 – April 2010)*

<b>Kiosk Site</b>	<b>Total Pounds</b>	<b># Pick ups</b>	<b>Pound/Pick Up</b>
Alpine Sheriff Station	100	9	11.1
Borrego Springs Sheriff Station	94	10	9.4
Campo Sheriff Station	32	3	10.7
Fallbrook Sheriff Station	201	20	10.1
Julian Sheriff Station	21	4	5.3
Lakeside Fire Station #3	157	10	15.7
Pine Valley Sheriff Station	91	11	8.3
Valley Center Sheriff Station	132	11	12.0
<b>Totals</b>	<b>828</b>	<b>78</b>	<b>10.6</b>

The innovative partnership with public safety agencies (the Sheriff and the Lakeside Fire Department) has enhanced the safety of this program and likely prevented any attempted break-ins to the kiosk units. To date there have been no reports or evidence of tampering or vandalism. Residents using the sharps kiosks feel secure that they are doing so at a safe location with low risk of criminal activity.

The creation of fixed sharps collection kiosks has allowed for more sustainable and convenient disposal options for residents. The total amount of sharps collected by the County HHW program has increased substantially in the past few years (See Table 2 below), with a significant proportion of the sharps collected from the kiosks.

*Table 2: Sharps Collections from HHW Program (Including Kiosks, PHHWCF & One-day events)*

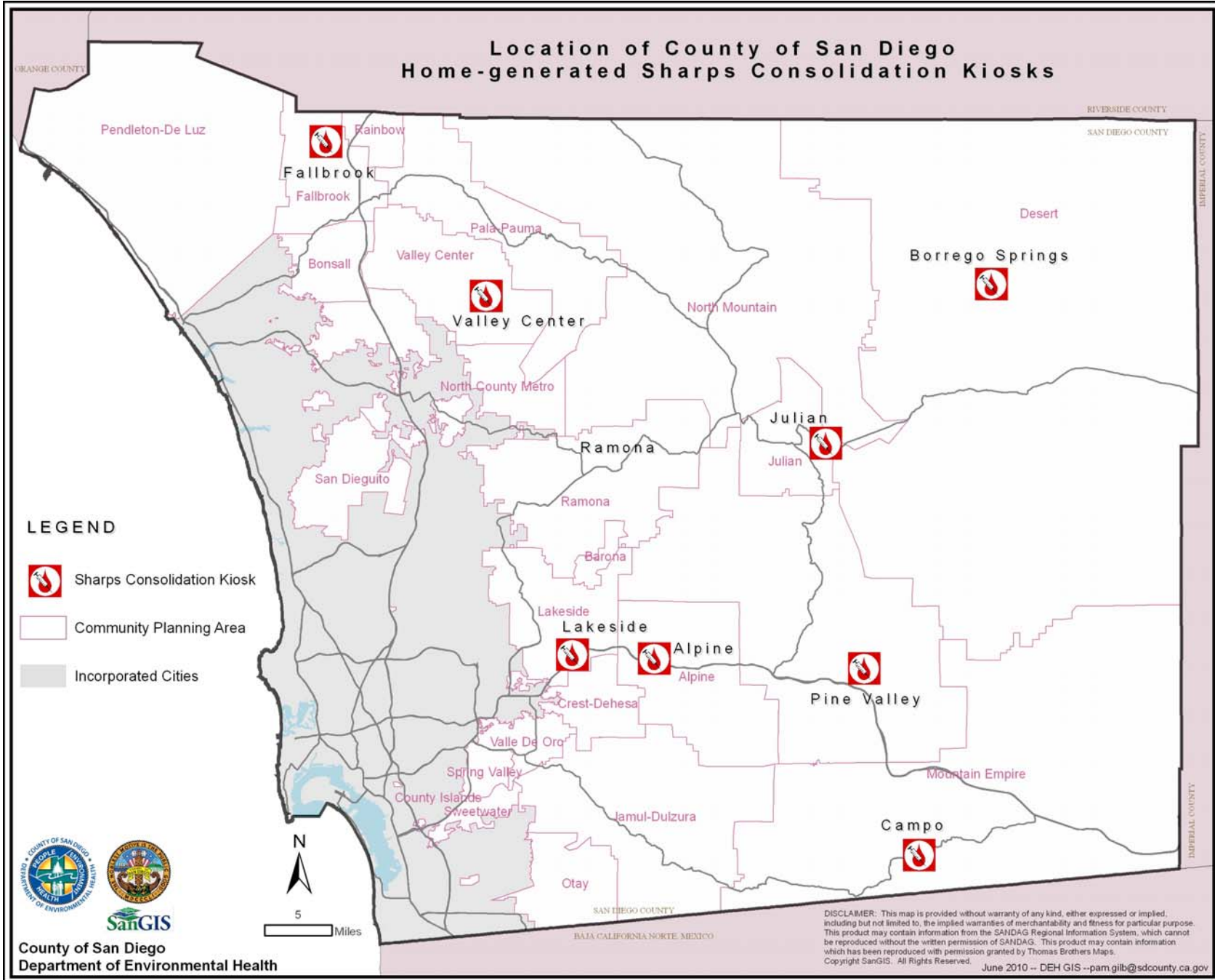
<b>Fiscal Year</b>	<b>Pounds of Sharps collected at Kiosks</b>	<b>Total Pounds of Sharps collected in HHW Program</b>
2006-2007	0	0
2007-2008	0	35
2008-2009	84	819
2009-2010*	744	929

\* Based on collection information through April, 2010.

While the initial cost investment in the equipment for the project was relatively high, the ongoing costs are comparable to managing sharps at a Permanent HHW collection facility. Although the initial infrastructure for the program was established with the use of state grant funds, the ongoing cost of the program has been maintained within the existing Household Hazardous Waste program budget.

While ultimately it would be preferable for private institutions such as waste haulers, medical facilities, and pharmacies to accept sharps back from the public, in the initial absence of infrastructure, the County was able to quickly initiate a successful and cost-effective program. The program has continued to accept increasing amounts of sharps waste in a manner that is both convenient and safe for members of the public and furthers our Department's larger goal of protecting public health through leadership, partnership and science.

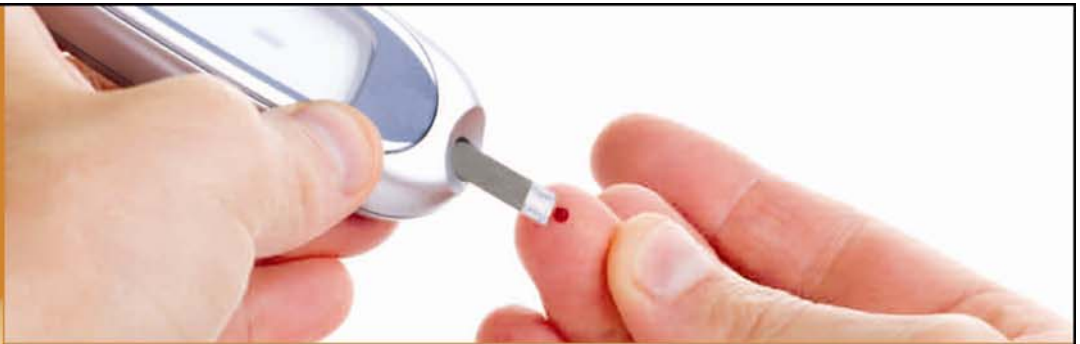
# Location of County of San Diego Home-generated Sharps Consolidation Kiosks



# Keep Used Needles Out of the Trash!



Funded By A Grant From  
The Department of Resources Recycling and Recovery (CalRecycle).  
Sponsored by The County of San Diego Department of Environmental Health



## Used sharps such as needles, syringes, and lancets can cause serious harm if not disposed of properly.

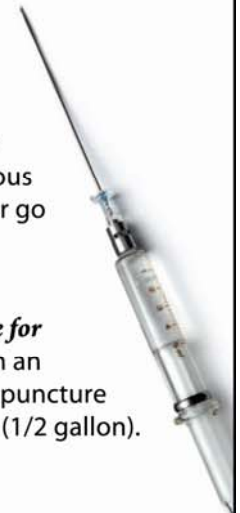
It is illegal to throw sharps in the trash or recycling containers,  
or to flush down the toilet.

Free and convenient collection kiosks are available in several  
unincorporated communities. For locations and more information  
please call the County of San Diego Household Hazardous  
Waste Hotline at: **1-877-R-1-EARTH (877-713-2784)** or go  
online to: [www.wastefreesd.org](http://www.wastefreesd.org)



*Free collection containers are available near you for a  
limited time. Call the number above or visit our website for  
more information.* Please store and drop-off sharps in an  
approved sharps collection container or in a sealed, puncture  
resistant, non-glass container no larger than 2 liters (1/2 gallon).

Collection kiosks are for residential use only.



Advertisement posted in local news publications in 2009 and 2010.



Placarding on the Sharps Disposal Kiosks instructs users on proper disposal.



Community health fair in Borrego Springs – Distribution of sharps containers and advertising of new sharps kiosks.

