



[Issue](#) | [Background](#) | [Findings](#) | [Conclusions](#) | [Recommendations](#) | [Responses](#) | [Attachments](#)

San Mateo County's Pharmaceutical Disposal Program

Issue

Is the San Mateo County's Pharmaceutical Disposal Program a viable program that offers the public a safe and convenient alternative for the disposal of pharmaceuticals?

Background

San Mateo County's (County) Pharmaceutical Disposal Program (Disposal Program), started in September 2006, and provides a convenient, environmentally sound way for citizens to dispose of both human and veterinary pharmaceutical drugs. The program is intended to provide disposal sites at law enforcement agencies throughout the County. This is an improvement over the previously advocated method of flushing unused pharmaceuticals down the toilet. The Disposal Program goals focus on avoiding potentially dangerous medication dosage errors by seniors, reducing or preventing recreational pharmaceutical drug use, and stopping the continuing contamination of the environment. The disposal program is monitored primarily by tracking the total number of pounds collected and disposed of by the contractor. The program encourages cleaning out expired and unneeded pharmaceuticals from home medicine cabinets. San Mateo County's Disposal Program is "believed to be a national first," and one of only two such programs in the State.

Over the last decade, scientists and the environmental community have raised concerns about the potential impacts of pharmaceuticals released into the environment through wastewater systems. Studies by the United States Geological Survey (USGS) in 1999-2000 indicate small concentrations of prescription drugs and over-the-counter medications in waterways nationwide.¹ These contaminants include prescription drugs such as hormones, antidepressants and antibiotics, as well as over-the-counter medications such as cold/flu remedies, pain relievers, antiseptics, and veterinary medicines.²

In addition to environmental concerns, there is also concern regarding the abuse of prescription and over-the-counter pharmaceutical drugs. While it is difficult to ascertain the extent of pharmaceutical drug abuse in San Mateo County, consider this statement from a drug treatment website: "Young people are abusing prescription drugs in rapidly increasing numbers. Without concern for safety or side effects, children as young as twelve are habitually taking opiates, central nervous system depressants, and stimulants, to get high and self-medicate."³ Studies by The Partnership for a Drug-Free America indicated that "1 in 5 teens has abused a prescription pain medication; 1 in 10 report abusing prescription stimulants, 1 in 10 has abused cough medicine."⁴

According to the National Clearinghouse for Alcohol and Drug Information, as many as 17% of adults, ages 60 and over, abuse prescription drugs. Narcotic painkillers, sleeping pills, and tranquilizers are common medications of abuse.⁵ For example, data collected from the San Mateo Medical Center (Medical Center) indicated there were a total of 294 cases who sought medical attention for accidental overdose of a pharmaceutical. Twenty-eight were children, 16 were adolescents, 224 were adults, and 27 were seniors.⁶

As a gauge of public need, a member of the San Mateo County Board of Supervisors worked with the County's Division of Environmental Health to set up an initial collection event during Earth Week in 2005. This County effort generated 235 pounds of pharmaceuticals from 13 collection points throughout San Mateo County.

The Supervisor, in conjunction with the San Mateo County Police Chiefs and Sheriffs Association, developed the Disposal Program. During an initial trial period in Daly City, Pacifica, and San Bruno, almost one ton of discarded pharmaceuticals were collected. The program was then expanded to other cities throughout the county.

As of January 2009, 14 peninsula law enforcement agencies were managing 13 drop-off sites countywide.⁷ Each site maintains a white collection box that has been appropriately labeled with the biohazard insignia to receive expired or unwanted pharmaceuticals. Placing collection boxes in police and sheriff department facilities satisfies Federal Drug Enforcement Agency (DEA) laws regarding the collection, security and handling of controlled substances.⁸ Federal laws and state regulations do not allow for the collection of controlled substances by pharmacies or at senior centers without the presence of a law enforcement officer. Currently, there is a proposed Congressional bill (HR 1191) which would amend the Federal Controlled Substance Act. The bill directs the DEA to draft options for states to adopt, or not, rules regarding the collection and disposal of controlled substances.

The participating law enforcement agencies are responsible for monitoring and securing their collection box and its contents. Some agencies transport the contents directly to the Sheriff's Office while others call an approved hazardous waste contractor for pick up. This contractor is licensed and bonded to collect, transport, and dispose of hazardous waste. The contractor picks up the locked container and disposes of the pharmaceuticals in an appropriate commercial incinerator. The collection program targets the disposal of over-the-counter and unused prescription pharmaceutical drugs. Although not part of the Disposal Program, sharps (i.e. needles) and illegal substances are often disposed of in the collection boxes. As of January 2009, new state regulations require all health care facilities to accept needles and syringes separate from any pharmaceuticals.

The day-to-day operation of the Disposal Program contract is currently managed by the San Mateo County Division of Environmental Health. The initial hard costs of the program to the County were \$1600 for the purchase and refurbishing of collection boxes. The disposal vendor contract for the pickup and incineration of the collected pharmaceuticals mandates a \$60 fee per pick up plus \$0.75 per net pound of pharmaceuticals. Currently, participation in the program by law enforcement agencies requires an \$800 investment in the collection box. From its initial start in September 2006 through December 2008, the County has disposed of 14,500 pounds

(7.25 tons) of pharmaceuticals at a cost of \$22,000. Twenty five thousand dollars is allocated annually in the County budget for the program's operation.

The Disposal Program is promoted on Earth Day in April of each year. Drop sites are listed in the San Mateo County Pollution Prevention Program literature. The drop-off locations have also been recently added to the County's web page. Minimal County funds have been used to market the program.

Since its inception, the program has received awards from the National Association of Counties, the California Department of Environmental Protection, and the San Francisco Bay Regional Water Quality Control Board.

While some indications of chemicals and pharmaceuticals have been found in surface water in San Mateo County, there are no hard data collected by wastewater treatment facilities or the County to identify specific pharmaceutical contaminants. Wastewater treatment systems are designed to remove conventional pollutants such as solids, biodegradable materials, bacteria, and viruses, but do not have the technological capacity to directly reduce medication contamination in the wastewater systems. None of the existing wastewater collection and distribution agencies have the capacity to test for the contamination of pharmaceutical drugs in the waste water system. Local wastewater and environmental experts support evidence provided in national studies. They believe that any efforts to prevent pharmaceuticals from entering and contaminating the ground water supply systems are significant prevention efforts and will produce positive and measureable results in the future. Drinking water from the Hetch Hetchy water system is not affected by pharmaceutical contamination.

Statistics maintained by the San Mateo County Narcotics Task Force indicate that of the 374 cases handled by the task force in 2008, less than 10 cases involved pharmaceutical drugs. These cases resulted in the confiscation of 128 OxyContin and 225 Vicodin tablets, with a street value of \$20 per tablet. Far more illegal drugs were confiscated countywide by the task force in 2008 (500,000 tablets countywide). However, local narcotics and law enforcement experts indicate that the abuse of pharmaceutical drugs is significant, though not generally recognized or reported. Abuse is considered a "quiet storm of household drugs" with potential offenders including family members, friends, physicians, youth, baby sitters, and senior citizens. Law enforcement experts interviewed by the Grand Jury firmly believe that removal of otherwise unchecked pharmaceutical drugs from potential illegal uses will have a positive result in decreasing drug use countywide.

Investigation

The 2008-2009 San Mateo County Civil Grand Jury interviewed a member of the San Mateo County Board of Supervisors, a Legislative Aide to the Board of Supervisors, and representatives from the following: the San Mateo County Sheriff's Department, various city Police Departments, the Environmental Health Services Division, San Mateo County Health Department, San Mateo County Narcotics Task Force, additional Medical Centers, and a Water and Waste Water Resources agency. Additionally, the Grand Jury researched websites and articles, and reviewed local documents and reports.

Findings

The 2008-2009 San Mateo County Civil Grand Jury found that:

1. The Pharmaceutical Disposal Program (Disposal Program) offers a convenient and low cost alternative to flushing pills and medicinal liquids, human or veterinary, into the wastewater stream and the environment.
2. The program has thus far diverted over 7.25 tons of potentially dangerous pharmaceuticals from the street and from potential environmental contamination.
3. There are no disposal bins in Brisbane, Colma, East Palo Alto, La Honda, Half Moon Bay, Menlo Park, Portola Valley, or Woodside.
4. Marketing efforts to inform citizens of San Mateo County's pharmaceutical disposal sites have been minimal.
5. The Disposal Program is monitored primarily by tracking the total number of pounds collected and disposed of by the contractor.
6. Currently, the South San Francisco Blue Line Transfer station collects sharps, and plans are underway to also collect them in Pescadero, Ox Mountain, San Carlos Transfer Station, and Tower Road. Four Fire departments in San Mateo County collect sharps. As of January 2009, all hospitals are required to take sharps back from patients and dispose of them with their regular hazardous waste stream disposal.
7. The Disposal Program is governed by current federal laws and state regulations especially those pertaining to collection and disposal of controlled substances.
8. County law enforcement experts firmly believe that removal of otherwise unchecked pharmaceutical drugs from potential illegal uses will have a positive result in decreasing drug use countywide.
9. Manufacturers of pharmaceuticals do not collect and dispose of their unused and expired consumer products.

Conclusions

The 2008-2009 San Mateo County Civil Grand Jury concludes that:

1. The San Mateo County Pharmaceutical Program (Disposal Program) offers the public, with its 13 drop-off sites, a convenient, cost-effective, safe and secure alternative to the disposal of pharmaceuticals.
2. The Disposal Program is limited by current federal laws and state regulations especially those pertaining to the collection and disposal of controlled substances.
3. All communities in the County should participate in this worthwhile program because of the success of the 13 participating cities.
4. The Disposal Program to date has collected more than seven tons of unused pharmaceuticals despite minimal marketing efforts to increase public awareness.
5. The Disposal Program would be more effective if it included the collection of sharps.
6. Manufacturers of pharmaceuticals make no effort to take responsibility for the collection and disposal of their unused or expired consumer products.

Recommendations

The 2008-2009 San Mateo County Civil Grand Jury commends the San Mateo County Board (Board) of Supervisors for establishing the Pharmaceutical Disposal Program and recommends that the Board direct the San Mateo County Division of Environmental Health to:

1. Develop a marketing plan to promote the Pharmaceutical Disposal Program (Disposal Program) at the pharmaceutical dispensing sources throughout the County including pharmacies, doctor offices, hospitals, medical centers, veterinary clinics, senior centers, and retail outlets.
2. Expand the Disposal Program throughout the County by working with local jurisdictions to establish the program in all appropriate law enforcement locations.
3. Explore development of a pharmacy take-back option for unused pharmaceuticals in partnership with pharmaceutical manufacturers.
4. Expand the Disposal Program to include a separate container for sharps at the same drop-off locations.
5. Adopt a resolution in support of HR 1191 and other federal and state legislation that encourages the appropriate disposal of unused pharmaceuticals.

Footnotes:

¹ Buxton, Herbert T. and Kolpin, Dana W. Pharmaceuticals, Hormones, and Other Organic Wastewater Contaminants in U.S. Streams, USGA Fact Sheet FS-027-02, June, 2002

² North, Karin D., Keeping Surface Waters Drug Free: The New Water Quality Challenge, *League of California Cities Magazine*, July, 2005

³ Addiction Treatment Resources for Teens and Young Adults, www.drugrehabtreatment.com

⁴ Partnership for a Drug-Free America, Preventing Teen Abuse of Prescription Drugs-Fact Sheet, 2009

⁵ Sollitto, Marlo, Editor, Seniors and Prescription Drug Addiction, Agingcare.com

⁶ SMMC Accidental Poisoning Cases report 2005-2008

⁷ Law enforcement agencies currently participating in the Disposal Program include Atherton, Belmont, Burlingame, Daly City, Hillsborough, Millbrae, Pacifica, San Bruno, San Carlos, San Mateo (also serves Foster City), South San Francisco, plus the Sheriff's offices in Redwood City and Moss Beach (also serves El Granada).

⁸ U. S. Department of Justice, Drug Enforcement Agency, Title 21, United States Code [USC], Controlled Substances Act

AUG 04 2009


**CLERK OF BOARD
BY Marie St. Placide DEPUTY**



**COUNTY OF SAN MATEO
Inter-Departmental Correspondence**

County Manager's Office

DATE: July 20, 2009
BOARD MEETING DATE: August 4, 2009
SPECIAL NOTICE/HEARING: None
VOTE REQUIRED: None

TO: Honorable Board of Supervisors
FROM: David S. Boesch, County Manager 
SUBJECT: 2008-09 Grand Jury Response

RECOMMENDATION:

Accept this report containing the County's responses to the following 2008-09 Grand Jury reports:

1. Camp Glenwood Should Remain an Honor Camp,
2. San Mateo Medical Center's Medical Administration Check System, and
3. San Mateo County's Pharmaceutical Disposal Program

BACKGROUND / DISCUSSION:

The County is mandated to respond to the Grand Jury within 90 days from the date that reports are filed with the County Clerk and Elected Officials are mandated to respond within 60 days. To that end, attached are the County's responses to the Grand Jury reports on Camp Glenwood and the Medical Center's Medication Administration Check System issued on May 20, 2009 and the Pharmaceutical Disposal Program, issued on May 26, 2009.

Acceptance of this report contributes to the Shared Vision 2025 outcome of a Collaborative Community by ensuring that all Grand Jury findings and recommendations are thoroughly reviewed by the appropriate County departments and that, when appropriate, process improvements are made to improve the quality and efficiency of services provided to the public and other agencies.



San Mateo County's Pharmaceutical Disposal Program Report

Findings:

Staff is in general agreement with the Grand Jury's findings.

Recommendations:

The Grand Jury recommends that the San Mateo County Board of Supervisor's direct the San Mateo County Division of Environmental Health to:

- 1. Develop a marketing plan to promote the Pharmaceutical Disposal Program (Disposal Program) at the pharmaceutical dispensing sources throughout the County including pharmacies, doctor offices, hospitals, medical centers, veterinary clinics, senior centers, and retail outlets.**

Response: Agree in part. The Pharmaceutical Disposal Program, which includes disposal of sharps, is currently included as part of our pollution prevention outreach efforts. Our outreach materials are widely distributed and include many of the locations recommended by the Grand Jury. However, there is no dedicated source of funding to provide outreach materials dedicated solely for this program.

- 2. Expand the Disposal Program throughout the County by working with local jurisdictions to establish the program in all appropriate law enforcement locations.**

Response: Disagree. The 14 jurisdictions currently participating are situated to provide convenient access to neighboring cities and jurisdictions. Smaller jurisdictions do not have the manpower available to provide the needed staff for collection and/or transportation of the material. Additionally, an increase in locations would increase disposal costs, without necessarily increasing the amount of pharmaceuticals collected, as the collection costs include a per stop charge.

- 3. Explore development of a pharmacy take-back option for unused pharmaceuticals in partnership with pharmaceutical manufacturers.**

Response: Agree. Statewide Extended Producer Responsibility (EPR) initiatives, which place the responsibility of product disposal on the producer, include pharmaceuticals. Environmental Health Staff are actively involved with these efforts.

4. Expand the Disposal Program to include a separate container for sharps at the same drop-off locations

Response: Agree. Staff is currently working with many of the jurisdictions to identify appropriate containers and collection methods for sharps.

5. Adopt a resolution in support of HR 1191 and other federal and state legislation that encourages the appropriate disposal of unused pharmaceuticals.

Response: Agree in part. Staff is concerned that HR 1191 would allow collection, storage and transportation of controlled substances without the requirement of having a Peace Officer present. This could lead to public and employee safety issues and criminal activity at those less secure collection locations. However, there are components of HR 1191 that staff support such as extending producer responsibility programs.