



COUNTY OF SAN MATEO
Inter-Departmental Correspondence
Health System



DATE: April 8, 2015
BOARD MEETING DATE: April 14, 2015
SPECIAL NOTICE/HEARING: None
VOTE REQUIRED: Majority

TO: Honorable Board of Supervisors

FROM: Jean S. Fraser, Chief, Health System
Heather Forshey, Director, Environmental Health

SUBJECT: Introduction of Safe Medicine Disposal ordinance and waiver of the reading of the ordinance in its entirety.

RECOMMENDATION:

Approve the introduction of an ordinance to add Chapter 4.116 (Safe Medicine Disposal) to Title 4 (Sanitation & Health) of the San Mateo County Ordinance Code, requiring any producer of a prescription or non-prescription drug offered for sale in San Mateo County to participate in an approved drug stewardship program for its collection and disposal, and waive the reading of the ordinance in its entirety.

BACKGROUND:

Pharmaceutical medications, by prescription or over-the-counter, assist in maintaining or improving human health when taken as directed. However, medications often are not completely consumed when they are purchased. As a result, most households have leftover, unwanted, or unused medications. Studies show that up to 33% of medications go unused annually, nationwide.

Leftover medications are causing harm to human and environmental health. Unused medications pose a significant risk of accidental poisoning and suicide. According to the Office of National Drug Control Policy, prescription drugs are the second most abused category of drugs following marijuana among young people ages 12 to 17. Abuse of non-prescription medication, such as cough and cold medicine, is also on the rise; pharmacies have now been mandated to control distribution of some over-the-counter drugs. This trend is also observed at the local level. Between 1990 and 2010, 16.7% of suicides in San Mateo County were due to medication poisoning.

Easy availability of unused medicine also leads to inadvertent misuse, such as seniors with multiple medications becoming confused and taking more medications than prescribed, or children accessing medications. San Mateo County Public Health data

from 1990 to 2010 shows 53% of unintentional deaths were due to legal medications.

People typically use the most convenient options for disposal, flushing down the toilet or tossing in the garbage. A recent survey of over 1800 residents in San Mateo County indicated 37% continue to flush or toss unwanted drugs. Disposal of medication by these methods has significant environmental consequences, particularly related to water quality. Studies conducted in the U.S. and the Bay Area show an increase of medications in water, sediment, and wildlife tissue samples as a result of the inability of sewage treatment systems to capture these chemicals in the treatment process. Trash disposal puts medications into landfills. In the older landfills constructed without liners, leachate contaminated with medications has the potential to enter into groundwater tables. Newer landfills constructed with liners capture leachate which is pumped off and typically discharged to the sewer system.

Unfortunately, even San Mateo County residents become aware of the environmental issues with improper disposal of medications, they tend to keep the medications because they do not know how to dispose of them safely. In the survey Environmental Health conducted, those respondents who indicated that they were aware of the environmental issues with storing or improperly disposing of unused medications also indicated that hoarding the medications was the most convenient solution.

DISCUSSION:

In 2006, in recognition of the problems cited above and with support from local law enforcement, San Mateo County established a medicine collection program. At the time, federal law restricted collection of certain classes of medications, including controlled substances such as painkillers, to law enforcement only. Since the program's inception, approximately 143,000 pounds of medications have been diverted from unintended consumers and the waste stream. At this point, approximately 24,000 pounds of unwanted medication are disposed of properly each year in San Mateo County. While the volume collected through this program indicates some progress, it is only a small fraction of the estimated amount of unused medications in the County.

At the same time, this program has cost the County an average of \$35,000/year in disposal fees alone. Management and administration of this program requires facilitation by multiple law enforcement agencies and Environmental Health staff. The cost of the staff time has not been quantified.

Recently, the federal Drug Enforcement Administration (DEA) rules restricting the handling of controlled substances have changed to allow retail, hospital, and clinic pharmacies to collect these classes of medications along with other types of prescription and non-prescription medications.

Giving residents intuitive and convenient options for disposing of unused medications would improve both human and environmental health in San Mateo County. Currently, producers of these medications bear none of the burden of the disposal of unused medications. From a fairness perspective, those who profit from the sale of these items should bear the cost of disposal. Under the current program, residents are subsidizing

the profits of manufacturers by paying for disposal via general taxes.

In addition, incentivizing the producers of these products will stimulate the most innovative, efficient and effective ways both of reducing the amount of unused medications and of disposing of the product. Making product manufacturers financially responsible for the full cost of their products – even the traditionally “externalized” cost of disposal -- has repeatedly been proven to be the most efficient way to deal with this public policy issue.

This model – called extended producer responsibility -- incentivizes manufacturers of products with problematic disposal issues to modify the product or manufacturing procedure to make the product recyclable or more easily disposable in the end. The extended producer responsibility model has proven to be successful in California with other products such as paint, thermostats, and mattresses. Safe medicine disposal ordinances based on the extended producer responsibility model have recently been adopted in Alameda County and the City and County of San Francisco.

Accordingly, Environmental Health is recommending the adoption of a safe medicine disposal ordinance similar to those adopted in Alameda County and the City and County of San Francisco that would require drug manufacturers to design and implement a plan for the collection, transport and disposal of leftover, expired or unneeded medicines from County residents (“stewardship plan”). Specifically, drug producers must find at least five pharmacies, law enforcement agencies, and/or other secure locations in each supervisorial district to place a locked metal bin for collection of unwanted drugs. If the drug manufacturers are not able to set up this minimum number of collection sites per supervisorial district, they must provide an alternative safe medicine disposal solution.

Collected medicines must be securely handled, transported and disposed of according to state and federal laws, including the policies of the DEA. Drug manufacturers must pay for the design and implementation of the stewardship plan without imposing a tax or fee on consumers to recoup their costs; however, they may join together in a stewardship organization to collectively fulfill their obligations under the ordinance.

Environmental Health will oversee the drug producers’ stewardship plans to ensure safety and compliance with the ordinance. Environmental Health staff may charge the drug manufacturers their hourly rate for time spent reviewing stewardship plans for approval. Environmental Health may also fine drug manufacturers for failure to comply with the ordinance.

The ordinance gives manufacturers nine months to submit their compliance plan.

County Counsel has reviewed and approved the ordinance.

Adoption of the Safe Medicine Disposal ordinance will contribute to the Shared Vision 2025 outcome of a Healthy Community by reducing the human and environmental health damage caused by unused medications that are not properly disposed of. Currently, we

have 14 collection sites, each collecting 2,000 pounds per disposal site. The first full year after plans have been submitted and implemented, it is projected there will be an additional 11 sites, collecting a projected 49,100 pounds of unused medicines (56% increase).

PERFORMANCE MEASURE(S):

| Measure | FY 2015-16 Estimate | FY 2016-17 Projected |
|--------------------------------------|---|-----------------------------|
| Quantity of unwanted drugs collected | 27,500 pounds (avg. 2000 pounds per disposal site) | 49,100 pounds |

FISCAL IMPACT:

There is no Net County Cost associated with this ordinance. Drug producers have one year to submit and implement their stewardship plan, therefore we anticipate a cost savings of approximately \$35,000 in medicine disposal costs in FY 2016-17.