

# Assembly California Legislature

## Joint Hearing of the Assembly Committee on Labor and Employment and the Assembly Health Committee Hernández and Pan, Chairs

### "Worker Safety and Sharps Waste in Non-Healthcare Occupations"

Tuesday, May 13, 2014 – 1:30 p.m. to 3:30 p.m.  
State Capitol, Room 4202

## BACKGROUND SUMMARY

### HEARING OVERVIEW

The term “sharps” is used to describe disposable syringes, pen needles, intravenous needles, lancets and other similar devices that many people use to deliver medication to manage medical conditions at home. About nine million people in the U.S. currently use sharps at home. U.S. households use more than three billion disposable needles and syringes and 900 million lancets each year.<sup>1</sup> Common diseases and conditions managed by injectable medications include diabetes, cancer, multiple sclerosis, migraines, hormone replacement, and allergies. Some home-use pet and livestock medications are also delivered through sharps.

Sharps used in the home, known in California as “home-generated sharps waste,” are regulated medical waste, and governed by strict laws that prohibit disposal in regular trash cans or recycle bins. Unfortunately, many individuals continue to dispose of home-generated sharps waste illegally; as a result, sharps waste continues to be thrown into the municipal waste stream each year. Sanitation workers who collect, transport, and sort the waste stream, as well as members of the public, are put at risk of injury and disease because these sharps are improperly and illegally thrown away.

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<sup>1</sup> <http://www.fda.gov/downloads/ForConsumers/ConsumerUpdates/UCM278809.pdf>

Improperly disposed sharps pose serious health risks to anyone who encounters them. In addition to the immediate risk of a needle stick injury, sharps waste has the potential to expose individuals to bloodborne infectious diseases, such as hepatitis or Human Immunodeficiency Virus (HIV). Individuals who suffer needle stick injuries must receive immediate treatment and follow up care, including multiple lab tests and medications.<sup>2</sup> Extensive study and monitoring of healthcare workers has been done to track and reduce needlestick injuries in healthcare workers. Although needlestick injuries constitute a recognized physical hazard for non-healthcare workers such as sanitation, law enforcement, and janitorial workers, few studies have been conducted to document the magnitude of the problem in these occupations. Sanitation workers who collect, transport, or sort solid waste are at particular risk for encountering illegally and improperly disposed home-generated sharps waste, sustaining needlestick injuries, and getting exposed to dangerous bloodborne pathogens. When workers sustain needlestick injuries, their costs of care are borne by the waste management company, the workers' compensation insurer, and ultimately, taxpayers and ratepayers. This hearing explores the risk of needlestick injuries to "downstream" workers and potential associated worker's compensation costs, the ways in which needlestick injury data is collected, compiled, and analyzed, and potential solutions to address this problem.

## **SCOPE OF THE HEARING**

This hearing will explore the problem of needlestick injuries among solid waste workers who encounter illegally discarded used sharps during waste collection, transportation, sorting and disposal. Such workers include janitors, garbage truck drivers, recycling sorters, and landfill employees. Some of the sharps waste that these workers encounter comes from needles discarded in garbage or recycling bins by legal home sharps users, and some of the sharps waste may be generated by illegal intravenous (IV) drug users.

In addition to sharps waste in trash and recycling bins, used sharps are also often found on the street, in gutters and storm drains, on beaches, and in parks. Individuals in non-healthcare occupations who might encounter sharps waste in these settings include law enforcement, lifeguards, and park maintenance workers. While sharps waste in public places is an important aspect of the needlestick injury problem, it is beyond the scope of this hearing.

## **BACKGROUND**

*Sharps are ending up in the waste stream.* Although it is currently illegal in California for consumers to dispose of home-generated sharps waste in the trash or recycling, the fact remains that municipal sorting facilities report finding thousands of pounds of sharps in their lines each year.

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<sup>2</sup> Ibid.

According to Waste Management's 2012 safe needle disposal plan, "needlestick injuries continue to be the number one reported injury" at its Material Recovery Facilities and a frequent injury during transfer and disposal activities, in spite of rigorous safety procedures and investments in safety equipment.<sup>3</sup> The City of Sunnyvale reported 11 needlestick injuries at its waste facility since 2008, which cost the city \$13,750 in testing fees.<sup>4</sup> The City of Roseville reported 15 needlestick injuries at its materials recovery facility from 2010-2012.<sup>5</sup>

*Better data collection is necessary.* While there is ample data available about needlestick injuries in the healthcare workforce, few studies have examined the scope of needlestick injuries in non-healthcare occupations.<sup>6</sup> A recent study found a low rate of Emergency Department visits for community-acquired needlestick injuries, but the study excluded non-healthcare work-related injuries.<sup>7</sup> The Coalition for Safe Sharps Disposal estimates between 450,000 to 863,000 people outside of healthcare settings are injured by sharps each year, resulting in costs of up to \$3.7 billion per year. A 1989 study among 940 waste industry workers from Washington State found that 6% suffered needlesticks while working, and 90% reported seeing used needles and syringes discarded with regular waste.<sup>8</sup> Anecdotal evidence of needlestick injuries among sanitation workers abounds, but a lack of quantifiable data remains a consistent hurdle to understanding the risk and cost associated with needlestick injuries outside the healthcare system.

One of the reasons it is difficult to pinpoint the number of needlestick injuries in non-healthcare occupational settings is due to current reporting requirements for needlestick injuries in non-healthcare occupational settings. Under current state law, the Department of Industrial Relations' (DIR) Division of Worker's Compensation is tasked with maintaining a worker's compensation information system (WCIS) that can provide statistical data for research.<sup>9</sup> The WCIS database includes information about puncture wounds and includes a field where detailed information about each injury may be included; needlestick injuries can be identified in the field for detailed information. A representative from DIR will further describe the methods for identifying injuries from sharps waste in this hearing.

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<sup>3</sup> <http://www.calrecycle.ca.gov/homehazwaste/sharps/reporting/Plans/2012/WM.pdf>

<sup>4</sup> Support letter for AB 1893, City of Sunnyvale, 2014.

<sup>5</sup> Support letter for AB 1893, City of Roseville, 2014.

<sup>6</sup> "Characteristics of persons and jobs with needlestick injuries in a national data set", Leigh *et al*, Am J Infect Control, Aug 2008.

<sup>7</sup> "Community-acquired, non-occupational needlestick injuries treated in US Emergency Departments," Jason J, J Public Health, Sept 2013.

<sup>8</sup> "Survey of occupational exposures of waste industry workers to infectious waste in Washington State". Turnberg WL and Frost F, Am J Public Health, Oct 1990.

<sup>9</sup> LC 138.6 (a)(4)

California law requires employers to report to the California Division of Occupational Safety and Health (DOSH) within five days their knowledge of every occupational injury or illness which results in lost time beyond the date of the incident or requires medical treatment beyond first aid,<sup>10</sup> and immediately for any case involving serious injury or illness, or death.<sup>11</sup> Once a worker files a worker's compensation claim, the employer is required to provide medical care. A treating physician who attends any injured employee is required to file a complete report of every occupational injury or occupational illness to the employee with the employer, or if insured, with the employer's insurer.<sup>12</sup>

California regulations state that all work-related needlestick injuries must be reported to DOSH, regardless of whether workplace is a healthcare setting.<sup>13</sup> If the employee is later diagnosed with an infectious bloodborne disease, the employer must notify DOSH.<sup>14</sup>

*Risk of infection.* Any sharps injury has the potential to transmit infectious diseases, especially blood-borne viruses. The three most common bloodborne pathogens include HIV, which leads to AIDS (Acquired Immune Deficiency Syndrome), hepatitis B virus (HBV), and hepatitis C virus (HCV). Accidental punctures by contaminated needles can inject hazardous fluids into the body through the skin. There is potential for injection of hazardous drugs, but contact with infectious fluids, especially blood, is by far the greatest concern. Even small amounts of infectious fluid can spread certain diseases effectively. The risk of infection after exposure to infected blood varies by bloodborne pathogen.

According to the Center for Disease Control and Prevention (CDC) the estimated risk of HIV infection from a sharps injury is about 0.3 percent (1 in 300).<sup>15</sup> The chance of becoming infected with HBV from a sharps injury is estimated to be between 23 and 62 percent. The average risk of HCV infection after a needlestick or cut exposure to infected blood is approximately 1.8 percent.

Under the CDC, National Institute for Occupational Safety and Health (NIOSH) collects extensive information on workplace illness and injury, including healthcare workforce needlestick injuries. The CDC has reported 57 documented cases and 140 possible cases of HIV transmission to U.S. health care workers between 1981 and December 2006. Of the 57 documented cases, 48 were associated with percutaneous injury (puncture/cut injury). Most of these cases involved nurses and lab technicians. According to the

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<sup>10</sup> LC 6409.1 (a)

<sup>11</sup> LC 6409.1 (b)

<sup>12</sup> LC 6409 (a)

<sup>13</sup> CCR Title 8, Section 14300.8

<sup>14</sup> Ibid.

<sup>15</sup> <http://www.cdc.gov/niosh/stopsticks/bloodborne.html>

National HIV/AIDS Clinicians' Consultation Center, there have been no documented cases of non-healthcare HIV transmission. National hepatitis surveillance data shows that approximately 400 health care workers became infected with HBV in 2001. Widespread HBV immunization of the healthcare workforce has led to a significant decline in new infections in the past decade. The number of health care workers who have acquired HCV occupationally is unknown. Although transmission of such pathogens to sanitation workers and community members has not been demonstrated, there is clearly potential for infection that must be addressed.

*Post-exposure treatment.* Although workers do not always go to the emergency department, the risk of exposure to bloodborne pathogens should be evaluated by a physician after any needlestick injury. For healthcare workers, the source patient may be known, allowing for testing to rule out exposure and risk. For non-healthcare workers, assessment and management of risk is often difficult because of the unknown nature of the source of blood. Workers experiencing needlestick injury should be provided testing, counseling, and possible post-exposure prophylactic (PEP) treatment. Taking into account known risk factors, the patient and physician will determine whether PEP is appropriate. If necessary, it is recommended that HBV and HIV PEP begin within 24 hours of exposure. There is currently no HCV PEP available.<sup>16</sup>

*Precautions to reduce needlestick injury in waste facilities.* When a loose sharp or a container of sharps (either in an approved container, or an unapproved one, like a liter soda bottle) is found in a workplace that could reasonably anticipate coming across sharps, the workplace must adhere to the Bloodborne Pathogens Standard.<sup>17</sup> In summary, the sharps must be carefully removed from the location and placed into an approved container, then transported to an appropriate facility that manages medical waste. The sanitation industry - including municipal trash and recycling facilities, haulers, drivers, and sorters - is considered to have a workplace where workers can reasonably anticipate coming across sharps waste, as there are a variety of settings in which sharps can be found. For instance, sharps have been found on recycling sorting lines, loose in bins or in truck compactors, and stuck in machinery. For waste facilities, each time a sharp is found and removed from the waste stream, sanitation workers are put at risk of needlestick injuries, and taxpayer dollars pay for the disposal.

A variety of precautions are used to reduce risk of needlestick injury in sanitation workers. Waste recovery employers report required use of annual safety training, special protective gloves and tongs for handling sharps, on-site approved sharps containers, and specific shut-down procedures when sharps are found in bins or on sorting lines. Some companies offer free HBV vaccines to employees, but this is not required by law and not consistently offered.

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<sup>16</sup> National HIV/AIDS Clinicians' Consultation Center

<sup>17</sup> CCR, Title 8, Section 5193

*Summary of current laws regarding home-generated waste in California.* Since 2008, it has been illegal in California for sharps consumers to throw away their home generated sharps in the general waste stream, including in municipal garbage or recycling bins.<sup>18</sup> This is because all sharps waste and components of a used sharp are considered medical waste, which has special collection, transportation, and disposal requirements, and because the state recognized the problems associated with sharps in the general waste stream.<sup>19</sup> Home-generated sharps waste must be placed into a sharps container before the waste is transported out of the home of a sharps user. All used sharps must be placed into containers, regardless of type, and regardless of whether the sharp includes safety features (i.e., a retractable needle).

The statutory definition of a sharps container is “a rigid puncture-resistant container that, when sealed, is leak resistant and cannot be reopened without great difficulty”.<sup>20</sup> FDA-cleared sharps containers are made of rigid plastic and have a line that indicates when the container is full and should be disposed.<sup>21</sup> FDA-cleared sharps containers are sold for consumer purchase by several companies, including several that also manufacture sharps. Additionally, some local enforcement agencies provide approved sharps containers free of charge upon request at household hazardous waste facilities.

State law makes it illegal to dispose of home-generated sharps waste in the trash or recycling containers, but does not currently required an FDA cleared container. Sharps waste must be transported to a collection center in a sharps container approved by the local enforcement agency (LEA). The state serves as the LEA for about half of the counties in California.<sup>22</sup> Some, but not all LEAs will accept sharps waste in non-FDA cleared containers. What is considered an approved container varies amongst LEAs; while some do accept sharps waste in sealed and labeled plastic bottles, others direct their customers to avoid using plastic bottles and require FDA-cleared containers.

An approved container filled with sharps waste is required to be transported and dropped off at an approved facility that accepts home-generated sharps waste. Such facilities may include a registered medical waste generator (such as a hospital, doctor’s office, or veterinarian’s office), an approved consolidation point for home generated sharps waste (such as a needle exchange program location), or a household hazardous waste facility (HHWs) (such as a landfill or refuse transfer station that accepts household hazardous waste).<sup>23</sup> Of these types of facilities, only HHWs are required by the state to

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<sup>18</sup> HSC 118286

<sup>19</sup> HSC Sec 117690 (a)(1)(D) and (a)(2)(B)

<sup>20</sup> HSC 117750

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<http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/HomeHealthandConsumer/ConsumerProducts/Sharps/ucm263236.htm>

<sup>22</sup> HSC 118286

<sup>23</sup> HSC 118147, HSC 117904, HSC 25218.13

accept home-generated sharps waste; the remainder of the locations accept such sharps waste voluntarily or as mandated by some local jurisdictions. Facilities that are not HHWs but do accept sharps waste may not accept used sharps that are not containerized in an approved sharps container.<sup>24</sup>

*Disposal options available to the consumer.* It is the responsibility of individual sharps consumers to comply with the law regarding containerization and transportation of home-generated sharps to approved locations. One of the issues this hearing explores is whether or not the options currently available to consumers are adequate to ensure that sharps waste does not get disposed in the municipal waste stream, where it can injure sanitation workers.

There are several ways in which consumers can legally dispose of sharps waste; unfortunately, not all sharps consumers are aware of these programs, and not all programs are available in all areas or to all consumers. Consumers may purchase approved sharps containers manufactured and sold by sharps manufacturers and retailers. Some consumers receive a container with the purchase of their product. Some consumers use curbside pick-up services available in a few jurisdictions in the state. Used sharps may also be transported in an approved mailback container for takeback programs operated by private entities. For instance, some pharmaceutical companies operate complimentary sharps mailback programs for their registered customers.<sup>25</sup> Some consumers are also offered sharps clipper devices and mailback containers that hold dozens of clipped needles.

Pharmacies and needle exchanges that provide non-prescription hypodermic needles/syringes are currently required to provide access to sharps containers for consumer purchase and/or access to an on-site collection box.<sup>26</sup> They are also required to provide written information or verbal counseling about safe disposal of sharps waste.<sup>27</sup> Pharmacies that dispense sharps are not required to provide information about where to dispose of sharps waste. If a pharmacy does choose to accept sharps waste, the pharmacy is only allowed to accept the waste if it is already containerized.<sup>28</sup>

CalRecycle maintains a website called the Facility Information Toolbox (FacIT) which provides options to search for locations to drop off various types of waste, including home generated sharps waste.<sup>29</sup> This website includes pharmacies, hospitals, HHW facilities, and other take-back locations.

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<sup>24</sup> HSC 117904 (d)(1)

<sup>25</sup> <http://www.calrecycle.ca.gov/homehazwaste/Sharps/Reporting/default.htm>

<sup>26</sup> BPC 4145.5 (e) (1-3)

<sup>27</sup> BPC 4145.5 (f)(3)

<sup>28</sup> BPC 4146

<sup>29</sup>

<http://www.calrecycle.ca.gov/FacIT/facility/List.aspx?ActivityTypeIDList=34&ActivityCategoryIDList=3&Mode=View>

Across the state, local governments have struggled to manage home generated sharps waste for many years, financing collection programs using public funds, which they are allowed to do under PRC 41502 and PRC 41512.

In the past, CalRecycle ran a one-time Sharps Grant Project for jurisdictions that have direct responsibility for Household Hazardous Waste; the program distributed containers and provided kiosks for collection points. The Project is currently in its second cycle.<sup>30</sup>

In spite of these programs, safe disposal options for consumers vary widely across the state. In addition to operating HHW facilities, many localities host annual HHW collection events where sharps can be disposed. Many counties provide free sharps containers upon request at HHWs. Some counties have installed “drop box” collection points where properly containerized sharps may be thrown away: the County of San Diego’s Community Health Division installed residential collection drop boxes in several unincorporated areas.<sup>31</sup> Tehama County, Santa Cruz County and others offer several unmanned kiosk locations.<sup>32</sup> As of mid-2010, the City of Sacramento has required all entities that dispense sharps to provide a sharps collection program at their locations at no additional cost to the general public.<sup>33</sup> Alameda County HHW facilities accept properly containerized sharps from Alameda County residents, and require proof of residency before they will accept the waste.<sup>34</sup> Some LEAs simply describe sharps disposal requirements on their websites.

*Current requirements on manufacturers.* Since 2009, drug manufacturers have been required to submit plans to CalRecycle outlining the measures they take, if any, to help their customers safely dispose of home-generated sharps.<sup>35</sup> CalRecycle posts these plans online for public review, but it does not evaluate the plans. The extent to which pharmaceutical manufacturers promote the legal and safe disposal of sharps waste varies from company to company. Under the law that required the plans to be posted online, the independent Senate Bill 486 Evaluation Team reviewed the plans in 2010, 2011, and 2012. The team, which included individuals from environmental health directors, multiple sclerosis and diabetes advocacy groups, and other consumer health organizations gave most of the manufacturers failing grades for their plans, although the

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<sup>30</sup> <http://www.calrecycle.ca.gov/homehazwaste/Grants/SharpsFY1112/default.htm>

<sup>31</sup> [http://www.sdcounty.ca.gov/deh/hazmat/chd\\_hhw\\_sharps.html](http://www.sdcounty.ca.gov/deh/hazmat/chd_hhw_sharps.html)

<sup>32</sup> <http://www.co.tehama.ca.us/toxics/sharps>; <http://www.cityofsantacruz.com/index.aspx?page=1094>

<sup>33</sup> <http://portal.cityofsacramento.org/General-Services/RSW/Collection-Services/Household-Hazardous-Waste/Sharps>

<sup>34</sup> <http://www.stopwaste.org/home/index.asp?page=624>

<sup>35</sup> PRC 47115-47116. Plans accessible here:

<http://www.calrecycle.ca.gov/homehazwaste/Sharps/Reporting/default.htm>

evaluations do not carry any legal consequences.<sup>36</sup> CalRecycle posts information about the Team's evaluations solely for informational purposes.

Unlike manufacturers of injectable pharmaceuticals, manufacturers of sharps sold in California are not required to submit a plan to CalRecycle, although one manufacturer has done so.

## **PREVIOUS LEGISLATIVE FINDINGS**

The Legislature has previously weighed in on the value of preventing needlestick injuries, but it pertained specifically to healthcare workers who were getting injured on the job while they tended to patients. At the time, bloodborne pathogen exposure was of great concern to healthcare workers and others as a result of rising rates of HIV infection. To help address this concern, the Legislature found and declared in 1995 that "Contaminated needlestick and other sharp instrument injuries threaten the well-being of health care workers," and that "Potential savings to the health care system from preventing exposure to bloodborne pathogens include reduced cost of follow up procedures which occur following a sharps injury, such as source and employee testing, counseling, and prophylactic treatment. In addition, costs related to lost work time, personnel, insurance, possible legal problems, and workers compensation could be diminished".<sup>37</sup>

Although the manner in which the sharps injuries sustained in healthcare settings are generally different from those sustained by waste workers, the Legislature may wish to consider extending the priorities of ensuring the well-being of workers and getting cost savings from fewer needlestick injuries to others, especially waste workers, who are likely to encounter home generated sharps waste.

## **CONCLUSION**

This hearing will discuss and expand upon the issue of needlestick injuries among non-healthcare occupations, with a focus on sanitation workers. It will review the public health hazard that illegally disposed home-generated sharps waste can create. The Committees will hear testimony from the perspectives of public health experts, regulatory agencies, waste sorting operators, sanitation workers, sharps consumers, and sharps producers. Finally, the Committees will discuss next steps and potential solutions to address this issue.

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<sup>36</sup> <http://www.calrecycle.ca.gov/homehazwaste/Sharps/Reporting/default.htm>

<sup>37</sup> HSC 105325