2010 Report to the Joint Standing Committee on Health and Human Services
From the Department of Health and Human Services

Pursuant to:
S.P. 608-L.D. 1600
Resolve, To Allow for the Proper Disposal of Medical Supplies

Background

During the Second Regular Session of the 124 Legislature the Health and Human Services Committee (Committee) considered LD 1600, Resolve, To Allow for the Proper Disposal of Medical Supplies. The Committee did not vote in favor of the Resolve, rather it voted to ask the Department of Health and Human Services to convene a working group, including the Department of Environmental Protection (DEP), to explore and address the issue of the disposal of medical supplies, including needles and to report back to the Committee by October 15, 2010. The Committee anticipates working on this issue with the Departments and working group members in 2011.

When the Committee considered LD 1600, Committee members expressed concern that the public have safe and convenient options for the disposal of needles, sharps and medical supplies. Later the Committee learned that grant funding might be available to place kiosks for safe needle disposal in select volunteer health facilities, including Maine’s nonprofit community hospitals and perhaps pharmacies, and sent a letter of support.

The Division of Environmental Health (DEH) at the Maine CDC is responsible for protecting and promoting public health by insuring the safety of Maine’s public drinking water and food prepared and served in restaurants, proper disposal of wastewater; prevention of unsafe exposures to radiation, radon, lead, mercury and other environmental hazards such as carbon monoxide and even excessive heat. The Division responds to many public health inquiries and complaints regarding private well water, mold, wood smoke, bedbugs, malfunctioning septic systems, public pools and spas, among many others. The Division works closely with Maine CDC’s Infectious Disease Division, particularly in the investigation of water and food borne diseases.

In August of 2010, the DEH was assigned the responsibility to carry out the Committee’s directions to convene a workgroup, arrange meetings, discuss options for the disposal of consumer generated sharps and medical supplies, and provide recommendations in the form of a report back to the Committee. DEH staff consulted with the staff of the Maine CDC’s Diabetes Program and the DEP’s Biomedical Waste to assist with the effort and to nominate appropriate candidates for the workgroup.
Workgroup members included:

Nancy Beardsley, Maine CDC, Division of Environmental Health  
Donna Pace, Maine General Hospital  
Donald Simoneau, American Legion  
Lisa Prescott, Cary Medical Center  
Bill Flagg, Cary Medical Center  
Dana Ivers, Maine CDC, Diabetes Program  
Tammy Butts, Maine Hospital Association  
Scott Austin, Maine DEP, Biomedical Waste Program  
Kate Dufour, Maine Municipal Association  
Rick Danforth, Maine Health and Environmental Testing Laboratory  
Doreen Adams, Stephen’s Memorial Hospital

Meetings
The workgroup met on September 16 and October 6, 2010 at the Maine CDC offices in Augusta. Not all workgroup members attended both meetings. Other interested parties were invited to join the workgroup, but were not able to participate in the meetings. Minutes of both meetings are attached to this report.

Focus
From the start, the workgroup focused on the disposal of consumer generated sharps, and not all consumer-generated medical supplies. Sharps include needles and lancets, such as those used to check one’s blood sugar level. The workgroup also established that they were seeking solutions for the disposal of consumer generated sharps, not those generated from home health providers, health clinics, hospitals or other providers.

The Issue
According to the US EPA, each year 8 to 9 million people across the country use more than 3 billion needles, syringes, and lancets – also called sharps – to manage their medical conditions at home. Sharps disposal by self-injectors is not typically regulated, and self-injectors do not always know the safest disposal methods. This situation could lead to haphazard disposal habits and increased community exposure to sharps. People at the greatest risk of being stuck by used sharps include sanitation and sewage treatment workers, janitors, housekeepers and children. People exposed to sharps face not only the risk of a painful stick, but also the risk of contracting a life-altering disease such as HIV/AIDS or Hepatitis B or C. All needle-stick injuries are rated as if the needle were infected with a disease. Victims of sharps-related injuries face the cost of post-injury testing, disease prevention measures, and counseling, even if no infection or disease was spread. Some diseases can take a long time to appear on test results, leading to months of testing and apprehension.

Since 1991, Maine has had Biomedical Waste Management Rules in effect which are administered by the DEP. Household consumers are exempt from all requirements of the rules except for packaging. Maine’s rule requires that household consumers place sharps into sealed rigid, leak and puncture proof containers that can then be thrown into the household trash. This disposal method does not appear to be well understood by some Maine consumers. Sharps continue to be thrown directly into the trash, or flushed down the toilet – some consumers are reportedly also burning their sharps in their wood stoves or fireplaces within their rigid containers.
Some states have prohibited the disposal of sharps in the household trash and advocate instead for community collection sites and proper disposal at biomedical waste facilities. These states and other advocates believe that even when sharps are properly placed in rigid containers, workers are still at risk if containers are not sealed; the trash is compacted, or placed into the recycling stream where the containers may be further handled. The Coalition for Safe Community Needle Disposal reported that across the country the number one injury to workers at recycling lines is needle stick injuries.

In 2009, a concerned Maine citizen brought this issue to the Legislature. He has a medical condition that requires the self injection of medicine. He was not comfortable with disposing of his used sharps in his household trash. His concern, and persistence, was the genesis for the creation of LD 1600, Resolve, To Allow for the Proper Disposal of Medical Supplies.

**Solutions Considered**

The workgroup discussed a number of possible solutions described below.

**Better Advertising of the Existing Disposal Rule**

Since 1988, Maine has had in effect a handling and disposal rule that exempts consumers from Maine’s Biomedical Waste Disposal Rules except for the packaging requirement. The DEP administers the State’s Biomedical Waste Program and these rules. The rules require that household generators place discarded household generated sharps in a rigid, puncture and leak resistant container. Preferred containers are made of heavy plastic and have screw on caps, such as liquid laundry soap bottles.

Once these containers are full they may be placed in the trash. The DEP does not recommend any labeling unless there is a chance that the waste may be sorted for recyclables, in which case the container should be labeled with “Do Not Recycle.” DEP recommends that these containers should never be commingled with recyclable wastes.

The existing rule for consumer generated sharps is not well understood by users.

**Household trash Segregation and Transfer Stations**

The workgroup agreed that consumers should not throw needles directly into trash or flush them down the toilet and discussed the possibility of a municipality’s transfer station accepting sharps in a separate collection area. This is not a solution that will likely be embraced by many towns as it would involve additional municipal operational costs to segregate, monitor and dispose of sharps as a special waste stream.

**Hospital Collection**

Some Maine hospitals accept sharps from their patients. The hospitals do not charge for this service and manage the costs of handling this waste as part of their operating budgets. The hospitals do not advertise this service to the general public and there are no plans to do so. One hospital representative stated that hospitals did not want to and could not afford to assume this responsibility for all consumers, especially in light of the MaineCare funds owed Maine’s hospitals.
Pharmacy Collection
The workgroup contacted a pharmacy representative who advocated for managing the waste according to the current rule for its proper disposal in household waste. He believed that putting pharmacies in the middle of the disposal process would add expense and risk to pharmacy personnel and customers especially if the waste is not packaged properly when it is brought to the pharmacy. He was strongly opposed to pharmacies serving as collection sites. He stated that most patients, if educated, will do the right thing when it comes to disposing of sharps and added that is where the effort should be made.

Mail Back Services
Several commercial mail back services currently operate in the State. These services supply the consumer with containers to deposit sharps and a mail back container to mail full containers back to the service provider for proper disposal. The workgroup acknowledged these services as a viable option and one that carries a cost for the consumer.

Kiosks-receptacles to collect consumer generated sharps
Solicitation of Grant Opportunities for the purchase of Kiosks
In 2010 Chrysalis Environmental Solutions, a company that produces and leases kiosks and operates in Rhode Island, New York and Massachusetts, submitted approximately 25 grant applications to purchase kiosks for placement in Maine hospitals. They believed that hospitals could voluntarily incorporate this waste into their existing medical waste contracts at no charge to the consumer. At this time, the company is waiting to hear back from several foundations on the outcome of the grant proposals. In the spring of 2010 the Committee submitted a letter of support for this effort.

In addition to the above proposal, a workgroup member believes that because this is a statewide issue, a state grant could be pursued to get this effort off the ground.

Caribou, Maine Pilot Project to Purchase Kiosks
Cary Medical Center staff presented their planned sharps disposal pilot project. The pilot would involve the placement of 2000 (1.4 quart) red colored sharps containers in Caribou and Presque Isle homes for the use of people who routinely use sharps. Two receptacles, or kiosks, each holding 5 gallons of waste, would be placed in the police departments in Caribou and Presque Isle, where they could be monitored 24/7. Consumers would bring their full 1.4 qt. containers or other full hard plastic containers to the police department and deposit them into the kiosk. The local Rotary Club has offered to purchase a kiosk at a cost of roughly $3000. Other groups have provided support and fundraising is ongoing. If a consumer is unable to deliver the sharps containers to the police department, a local police officer will pick up the receptacle at the consumer’s home and bring it back for deposit in the kiosk. When the kiosks are full, their contents are deposited into a 30 gallon receptacle. The 30 gallon receptacles would be transported to a collection site for disposal or recycling. One current disposal idea is to ship the waste to a facility in Texas, where it can reportedly then be converted into pellets which can be safely burned. A patent is pending on this process. Other options are being considered. The Cary Medical Center staff may also pursue grant funding to cover transport and disposal costs.
Possible Statewide Kiosk locations
The workgroup agreed that if kiosks are determined to be part of the solution, they must be placed facilities that are attended and monitored 24/7. Hospitals and health centers were offered as possible kiosk locations. The workgroup acknowledged that purchasing and placing the kiosk is only the first step. The waste must also be collected and transported to an authorized disposal facility and some entity must cover those costs.

Personal Care Attendants collecting and transporting sharps
The workgroup suggested that because personal care attendants work with patients in their homes, they could collect household sharps when they visit a home and transport them to an authorized collection location.

Utilizing a Maine Medical Waste Treatment Facility
The workgroup discussed the Maine Hospital Association’s medical waste treatment facility located in Pittsfield, Maine and operated by Oxus Environmental, LLC as a possible collection, transport and disposal option. The workgroup believed that its location in Maine may make it more cost effective than out of state options. The facility processes nearly all treatable medical waste generated by the 39 member hospitals of the Maine Hospital Association and is utilized by hundreds of other non-member generators. The facility provides complete transport, treatment and destruction services for medical waste from hospitals, clinics and other facilities. They offer sharps containers of all types and sizes, including reusable sharps containers.

Household Hazardous Waste Collection Days
The workgroup considered increasing the number of household hazardous waste collection days and adding sharps to the list of accepted materials. However, a DEP representative noted that only 1-5% of Maine’s population now participates in this program and that the DEP does not view collection days as a viable long-term management plan for most problematic wastes.

Maine’s Product Stewardship Law
At the request of the workgroup, staff from the DEP presented the workgroup with an overview of Maine’s product stewardship law. According to the DEP, “Product stewardship” is a principle that directs all participants involved in the life cycle of a product to take shared responsibility for the impacts to human health and the natural environment that result from the production, use, and end-of-life management of the product. The cost of managing wastes such as sharps has become a financial burden and health hazard for local communities, which have turned to the state government for assistance. State agencies are now turning to product manufacturers, retailers, and other potential industry partners to become part of the solution and to alleviate the burden created by what many local governments are calling an "unfunded industry mandate.” Maine is a national leader in the adoption of product stewardship law and other states have followed Maine’s lead. In 2010, the 124th second regular session of the Maine Legislature passed, An Act to Provide Leadership Regarding the Responsible Recycling of Consumer Products, more commonly called the Product Stewardship Law. By January 15, 2011, and annually thereafter, DEP may submit to the Legislature’s Natural Resources Committee a report on products that when generated as waste may be managed under a product stewardship program. Through this process, DEP may recommend establishing new product stewardship programs and changes to existing programs.
DEP’s advisory committee on product stewardship, the Maine Products Stewardship Working Group, reviews the report before it is submitted to the Legislature. This group includes the Natural Resources Council of Maine, the Maine Chamber of Commerce, the Maine Municipal Association, interested legislators, industry groups, municipal representatives and other State agencies.

Sharps appear likely to meet the requirements for recommending a new product stewardship program. To recommend a new product stewardship program the department must determine that one or more of the following criteria are met.

- The product or product category is found to contain toxics that pose the risk of an adverse impact to the environment or public health and safety;
- A product stewardship program for the product will increase the recovery of materials for reuse and recycling;
- A product stewardship program will reduce the costs of waste management to local governments and taxpayers;
- There is success in collecting and processing similar products in programs in other states or countries; and
- Existing voluntary product stewardship programs for the product in the State are not effective in achieving the policy of this chapter.

At a minimum, consumer generated sharps appear to meet the first, second and third criteria.

**Recommendations**

Based on the above discussions, the workgroup offered four recommendations for the Committee’s consideration.

1. **Education**: As a short term solution and something that could be achieved without too much cost or effort, and recognizing the deficiencies in this approach, the workgroup believes consumers and providers must become educated about the existing Maine rule regarding the packaging and disposal of consumer generated sharps.

The workgroup believes that placing sharps into rigid containers and disposing of them into the household trash, while not perfect, is a better immediate solution than disposing of sharps directly into the trash, flushing them down the toilet or burning them in wood stoves. The Maine DEP oversees these rules and could relatively easily and at little cost provide this information on their website and in other venues. The Maine CDC agreed to also include this guidance on their websites and disseminate the information through their direct services activities such as public health nursing and diabetes programs. Providers and hospitals must also provide this information to their populations. There is a risk of confusing the public should the disposal message change over time, such as if a coordinated collection program were later adopted by the state.
2. **Product Stewardship**: The workgroup believes that consumer generated sharps should be submitted to the DEP as a candidate product for inclusion in the new state Product Stewardship Program. The second regular session of the 124th Legislature passed LD 1631, now Public Law Chapter 516, called An Act to Provide Leadership Regarding the Responsible Recycling of Consumer Products and sharps appear to meet some of the necessary criteria noted above.

3. **Hospitals**: The workgroup supports those hospitals and other health care facilities that currently accept sharps from their patients at no charge to them.

4. **Mail Back Services**: The workgroup recognizes mail back services as a viable disposal option for those users that can afford to use it.

If requested, workgroup members are willing to assist the Committee with future actions regarding the disposal of consumer generated sharps.

Thank you for the opportunity to assist you with this important work.