

Massachusetts
Department
of
ENVIRONMENTAL
PROTECTION

fact sheet

Beverage Containers in Litter & Public Waste Receptacles

The Massachusetts Beverage Container Recovery Law of 1982 (The Bottle Bill) was designed to reduce litter and capture beverage containers for recycling. As the number of non-deposit beverage containers (water, sports drinks, teas, etc.) has increased in recent years, the Bottle Bill, while still effective for the containers it covers, has no influence on non-deposit containers. These containers now represent approximately 30 percent of beverage containers sold, many of which end up as litter or are disposed of as trash in public area trash receptacles.

To better understand the potential impact of updating the Bottle Bill to include additional beverage containers, MassDEP commissioned a study to examine the number and type of beverage containers found in litter at 12 community cleanup events. The survey took place during the spring of 2009. During the same time period, the study examined the number and type of beverage containers found in public area waste receptacles at both recreational parks and ball fields in five municipalities.

Study Highlights

Community Cleanup Events

Beverage containers comprised up to 60 percent of all litter collected.

Independent of alcoholic beverage containers left behind at party sites, non-deposit containers outnumbered deposit containers three to one.

Public Area Waste Receptacles

Beverage containers comprised 20 percent of all park waste and 40 percent of all ball field waste.

Non-deposit containers accounted for 85 percent of container waste at ball fields and 64 percent of container waste at public parks.

Community Cleanup Litter Study

The study looked at several types of cleanup events, including urban cleanups in Boston's Mission Hill and Cambridge's Central Square neighborhoods, town-wide cleanups in Auburn, Ayer and Groton, and park and river cleanups in Gloucester, Worcester, Milford and along the Mystic River and Charles River. The following charts display the full universe of beverage container types. As the prevalence of non-alcoholic and alcoholic containers in litter varies considerably, these two types of beverage containers were then examined independently.

2005 National Market Share
(Types of beverages sold in containers)

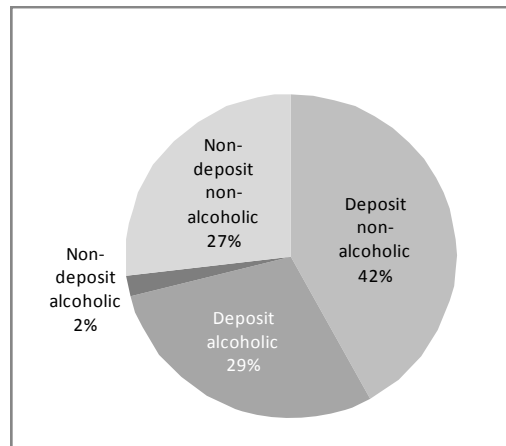


Figure 1 - 2005 market share of beverages sold in deposit and non-deposit containers (Gitlitz and Franklin, 2007)

2009 MA Community Cleanup Survey
(Types of beverage containers found)

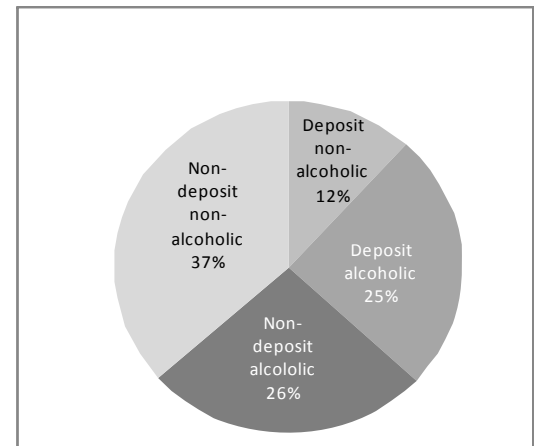


Figure 2 - Results for deposit and non-deposit containers found at cleanup events held in spring 2009

- Although **Non-alcoholic beverage containers** without a deposit (water, sports drinks, teas, etc) only represent about 39 percent of non-alcoholic beverage sales (Figure 1), they were three times as prevalent as non-alcoholic beverage containers with a deposit (Figure 2).
- **Alcoholic beverage containers** without a deposit (liquor and wine) represented about half of all alcoholic beverage containers collected (Figure 2). These containers make up only 2 percent of all container sales but represented approximately 26 percent of all containers collected as litter. Most of these containers were nips and flasks.
- **Non-container litter** - Half of the cleanup events provided information on the percentage of *all* litter that the containers represented. In these events, beverage containers comprised up to 60 percent of the total litter by volume.

Public Area Waste Receptacle Study

The study also examined litter in trash receptacles at both recreational parks and ball fields in five municipalities: Andover, Hopkinton, Lowell, Norwood and Quincy.

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Container Waste at Parks

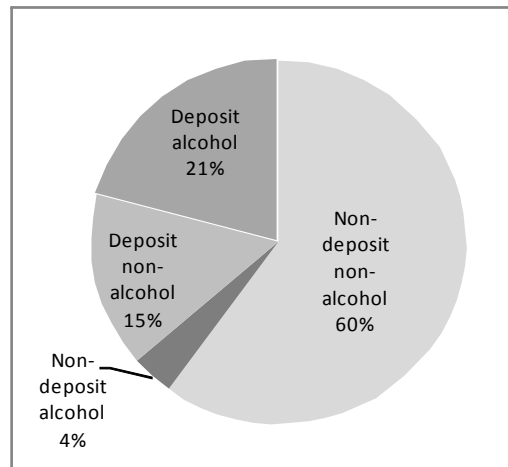


Figure 3 – Results for deposit and non-deposit containers found at public parks, 2009

Container Waste at Ball Fields

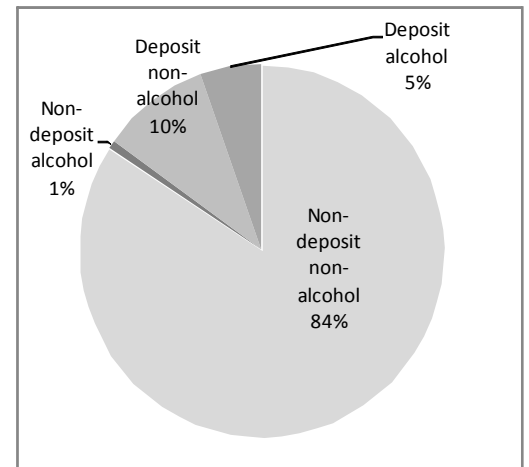


Figure 4 – Results for deposit and non-deposit containers found at ball fields, 2009

- **Public parks** – Non-deposit beverage containers accounted for 64 percent of all containers (Figure 3). Water bottles represented 39 percent of containers.
- **Ball fields** – Non-deposit containers accounted for 85 percent of all containers (Figure 4). Water bottles were the most prevalent, making up 58 percent of containers, followed by non-deposit sport drink, energy drink, juice and tea containers which comprised 27 percent.
- **Non-container litter** – Materials were sorted at both parks and ball fields to visually compare each category of waste. By volume, beverage containers made up 20 percent of park waste and 40 percent of ball field waste. Single serve cups (coffee, tea, soda) made up approximately 20 percent of waste in all locations.

For additional information or to request a copy of the complete study contact:
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