

Redemption Rates and Other Features of 10 U.S. State Deposit Programs

State	Redemption Rates (a)							Estimated percent of deposit beverage sales recycled via curbside programs (b)	Beverages Covered	Amount of deposit	Handling Fee	% of Beverage Units Covered by Deposit (c)	Population with Curbside Access (d)
	2013	2014	2015	2016	2017	2018	2019						
Michigan	95%	94%	93%	92%	91%	89%	89%	2%	- Beer & malt beverages - Carbonated soft drinks, mineral water, kombucha - Wine coolers & distilled spirits coolers	10¢	None. No redemption centers.	57%	61%
Maine	90%	90%	90%	90%	84%			3%	- All beverages except dairy products and unprocessed cider.	Wine & liquor ≥ 50mL: 15¢ All others: 5¢	4.5¢	91%	67%
Oregon	71%	68%	64%	64%	73%	81%	86%	3%	- All beverages except wine, distilled liquor, dairy milk and plant-based milk, and infant formula.	10¢	None; Co-op funds redemption centers in partnership with retailers.	88%	95%
Vermont	75%							4%	- Beer & malt beverages - Carbonated soft drinks & mineral water - Wine coolers - Liquor	Liquor: 15¢ All others: 5¢	Brand-sorted containers: 4¢ Commingled brands: 3.5¢	48%	76%
California	74%	71%	72%	72%	68%	66%	67%	Redemption rate reflects direct CRV redemption. Curbside and dropoff programs collect 12% of CRV beverage containers recycled.	- Beer & malt beverages - Carbonated soft drinks & mineral water - All other non-alcoholic beverages - Wine coolers & distilled spirits coolers - Excluded: milk, some juices, wine, spirits	<24 ounces: 5¢ ≥ 24 ounces: 10¢	Handling Fee of \$0.00934 per container paid to handling fee sites only. Processing payments for glass, PET, and HDPE average \$0.007 per container to redemption centers, curbside programs and other programs. All RCs and programs also keep revenue from scrap sales.	87%	91%
Hawaii	74%	71%	60%	65%	63%	65%	62%	Deposit containers collected at curbside (in Honolulu only) are included in reported statewide redemption rates; deducted here to show true refund redemption.	- Beer & malt beverages - Carbonated soft drinks & mineral water - All other non-alcoholic beverages - Wine coolers & distilled spirits coolers - Excluded: milk, wine, spirits	5¢	Variable fees: aluminum 3¢, glass 7¢, plastic 3.5¢, bi-metal 3¢. RCs also keep revenue from scrap sales.	88%	77%
New York	62%	64%	65%	66%	65%	64%	64%	7%	- Beer & malt beverages - Carbonated soft drinks & mineral water - Bottled water including flavored water - Wine coolers	5¢	3.5¢	78%	95%
Iowa	78%			65%				Recycling rate is 71%. An estimated 6% of containers sold are recycled through curbside & dropoff programs.	- Beer & malt beverages - Carbonated soft drinks & mineral water - Wine coolers - Wine & liquor	5¢	1¢	65%	66%
Massachusetts	66%	66%	59%	56%	57%	52%	50%	9%	- Beer & malt beverages - Carbonated soft drinks & mineral water	5¢	Redemption centers: 3.25¢ Retailers: 2.25¢	42%	77%
Connecticut	57%	53%	51%	49%	52%	50%	50%	9%	- Beer & malt beverages - Carbonated soft drinks & mineral water - Bottled water including flavored water	5¢	Beer: 1.5¢ Other beverages: 2¢	77%	86%

(a) Sources for redemption rates: CalRecycle (reported recycling rates x supermarket & recycling center participant shares), Connecticut Department of Energy & Environmental Protection, Hawaii State Department of Health, Iowa Department of Natural Resources, Maine Beverage Association, Massachusetts Department of Environmental Protection, Michigan Department of Treasury, New York State Department of Taxation and Finance, Oregon Dept. of Environmental Quality, Oregon Liquor Control Commission, Oregon Beverage Recycling Cooperative, Vermont Agency of Natural Resources. **Note:** the recycling rates shown here do not correspond to those used in CRI's Beverage Market Data Analysis (2020), because our research indicates different sales numbers than those reported by CalRecycle.

(b) California is the only state to count deposit containers recycled through curbside and dropoff programs; these containers have been deducted to show true refund redemption rates here. Hawaii includes curbside recycling of deposit containers in their reported redemption rates; we used 2014 data (the most recent available) to deduct these containers to show a true refund redemption rate. In Iowa, where the deposit container recycling rate is derived from a combination of sales data and waste composition study data, and represents redeemed containers as well as those recycled through curbside or dropoff, we have assumed that 6% of total deposit containers sold are recycled through curbside or dropoff programs, and the remainder of containers recycled are through refund redemption (shown here). For the other states, CRI has developed a scale that estimates that the lower the redemption rate, the higher the percentage of deposit containers being recycled at curbside.

(c) Percent of total beverages covered by deposit is calculated using CRI's best estimates of sales of deposit and non-deposit containers in 2018, based on our "2018 Beverage Market Data Analysis," The Container Recycling Institute, 2020. Note: the denominator (all possible beverage container types) includes dairy- and plant-based milks, and includes cartons and foil. In some cases, CRI deposit sales estimates (units sold) are different than those reported to or by the state; however, the market share of deposit vs. non-deposit containers is likely to be accurate.

(d) Data derived from Table 2-3 in "Final Report, 2008 ABA Community Survey," by R.W. Beck for the American Beverage Association, Sept. 2009. MA & IA numbers estimated with assistance from MA DEP and IA DNR staff (2019).