ELKAY®

Sustainability: Safer Water Directly Impacts the Health of the Building Envelope

By Jana Summey, ASSE Certified Legionella Water Safety & Management Personnel, Zurn Elkay

Nurses, staff and patients need to stay hydrated. How do we do it in a sustainable way? Do hospitals care about sustainability? The answer is an astounding yes! Sustainability in hospitals is now a mainstay goal and operational objective. Many, if not all, hospitals now include sustainability as a primary organization-wide goal and initiative. Many have formal sustainability and green teams and there are sustainability champions throughout hospitals.

"Health care itself is a leading contributor to pollution and climate change, against the mission to first do no harm, and mitigating health care pollution is a fundamental requirement for safe and high-quality health care delivery."

Dr. Jodi Sherman, M.D.

Associate Professor of Anesthesiology of the Yale School of Medicine, Associate Professor of Epidemiology in Environmental Health and Founding Director of the Yale Program on Health Care Environmental Sustainability in the Yale Center on Climate Change and Health

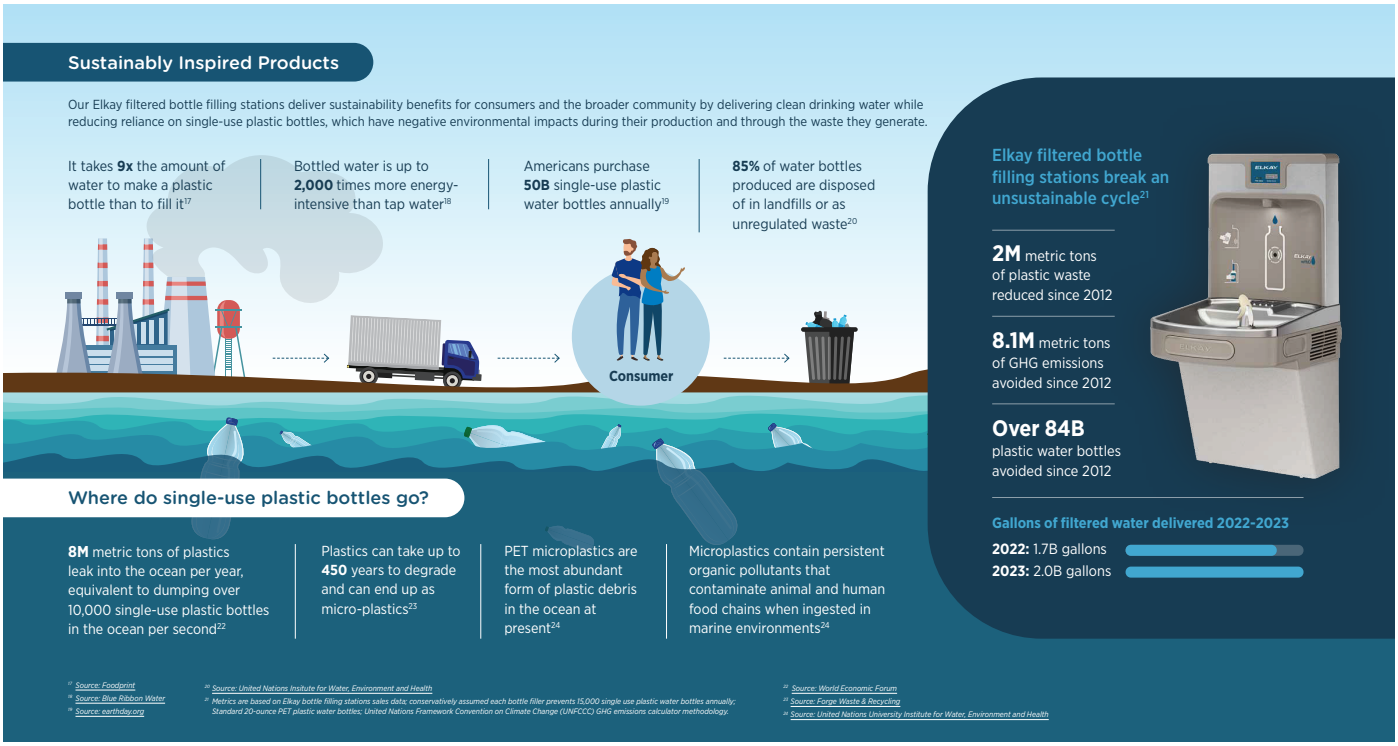
Hospitals are a major plastic waste producer. According to Practice Greenhealth:

- An estimated 25% of total waste generated by hospitals is plastic.
- Hospitals generate more than 29 pounds of waste per bed, per day.
- Single-use plastic in hospitals represents 5 million tons of waste per year. Most single-use plastic used in hospitals is associated with medical devices and supplies, such as plastic packaging around a syringe.

The health care world is adopting the mentality that there is a link between a healthy planet and a healthy patient. Fifty-eight percent of health care leaders expect sustainability to be a top priority in the next three years. Green teams are being formed and leaders are stepping up to the plate to lead sustainability initiatives. There is a huge movement to reduce one-use plastics in hospitals. There are carbon neutrality initiatives and an overall push to be more sustainable in all areas of hospital operations and services. What are hospitals doing to increase sustainability efforts and reduce waste? According to Practice Greenhealth and Healthcare Without Harm, two industry organizations leading sustainability efforts in health care, most hospitals are focused on nine main areas of sustainability opportunities.

- Reducing chemical usage
- Reducing food waste and growing sustainable and healthy food
- Reducing energy waste
- Improving building envelopes and systems
- Better connecting the link between the climate and health
- Improving procurement to reduce waste
- Reducing the environmental impact of health care related transportation
- Reducing plastic waste
- Conserving water

The last two focus areas of reducing plastic waste and conserving water are supported by providing safter water through bottle filling stations. They further reduce the carbon footprint associated with the manufacturing and distribution of single-use plastic water bottles. In 2022, bottle fillers avoided 1.72 million metric tons of CO2 that would have been emitted from the manufacturing of plastic water bottles, not to mention 426,000 metric tons of plastic waste.



Bottle filling stations have been estimated to save 75 billion single-use plastic bottles since 2012.

Use Case: Mercy Hospital, Springfield, MO

Mercy Hospital in Springfield, Missouri, had a general goal of helping the environment and decided to remove all plastic bottles from all facilities. This included removing plastic water bottles in the cafeteria, vending areas, gift shops and work areas. They switched to filtered bottle filling stations and reusable bottles and have saved nearly 100,000 gallons of bottled water annually and potentially eliminated approximately 500,000 plastic water bottles from landfills annually. They were able to have a huge impact and reduce the plastic water bottles by installing bottle filling stations. A secondary reason for installing the bottle filling stations was because of the higher water quality delivered through the filtered stations. Water filters can help reduce harmful contaminants such as lead, PFOA/PFOS, microplastics, cysts and Class 1 particulates.

Use Case: Aspirus Langlade Hospital, Antigo, WI

To protect against the spread of COVID-19, Aspirus Langlade put many measures in place at the start of the pandemic. One of these measures was to shut down the use of its water fountains.

With the water fountains shut down, Aspirus Langlade Hospital Nutritional Services stepped up and began providing free bottled water to staff and visitors. Approximately 1,700 bottles of water were given out each week. That's more than 88,000 bottles annually.

To reduce its reliance on single-use water bottles, while still providing free water to staff and visitors, Aspirus decided to stop handing our bottled water and to replace those efforts by installing water bottle filling stations. The stations offered an environmentally friendly alternative to drinking water from single-use plastic bottles. Thanks to these stations, Aspirus cut down on the amount of plastic waste generated in its facilities, while also providing significant long-term cost savings.

A refillable water bottle was gifted to each Aspirus employee in anticipation of the installation of the bottle filling stations. Employees are being encouraged to drink more water each day to reap the numerous health benefits associated with drinking water.

The installation of the bottle filling stations was headed by the Aspirus Sustainability Initiative, which was established in 2018 as a coordinated, strategic effort to identify and implement sustainability initiatives intended to improve the lives of patients and the health of communities. The initiative is in direct alignment with Aspirus Health's mission to heal people, promote health and strengthen communities.

A secondary reason for installing the bottle filling stations was to reduce germ transfer. "The water bottle filling stations are hands free, which dramatically decreases the spread of germs," said Penny Matuszewski, Director of Food & Nutrition Services at Aspirus Langlade.

She continued, "There is almost no risk of contracting harmful germs from these mechanisms since the spout is recessed and the sensor-activated bottle fill solves the problem of contamination, keeping bacteria and virus out of the equation. That is critical to us as a health care facility."

ELKAY
1333 Butterfield Road, Suite 200 | Downers Grove, IL 60515
630.574.8484 | elkay.com | ©2024 Elkay Manufacturing Company

by Zurn Elkay Water Solutions
(10/24) 340-286