

# KAISER PERMANENTE

## REDUCING, RE-USING & RECYCLING TO ELIMINATE WASTE

Hospitals in the U.S. annually generate more than 5.9 million tons of waste, much of which comes from scarce natural resources and ends up in our nation's landfills where wastes emit greenhouse gases and other pollutants. In addition to standard waste products — paper, cardboard, bottles and cans — health care has unique waste streams such as electronic equipment, infectious waste, radiological waste and other hazardous waste, such as solvents, that must be properly managed and treated in order to protect both the environment and public health. Cutting waste within the health care setting reduces operating costs while lowering exposure risks for health care workers and often creating good jobs for people in the local recycling industry.

Kaiser Permanente set an ambitious waste reduction target to re-use, recycle or compost at least 40% of our waste materials by the end of 2015 (excluding construction and demolition debris, where we often achieve much higher rates of recycling on a typical project), and we reached that target two years ahead of schedule.

Examples of Kaiser Permanente's rigorous waste reduction initiatives include:

- Recycling or composting non-medical waste
- Safely re-using medical devices
- Purchasing products high in recycled content and recyclability
- Building efficiency into our care delivery system

### Recycling and Composting Non-Medical Waste

Kaiser Permanente makes a priority of involving our staff and physicians in efforts to reduce the use of plastic bags, single-use water bottles and office paper. Our organization is rolling out efforts to compost food as well as paper towel waste in several of our facilities and office buildings.

In Southern California, Kaiser Permanente and Goodwill Industries have joined forces to collect and recycle many of the waste materials generated by Kaiser Permanente. Each year, the two organizations also host a series of region-wide community waste and donation campaigns to recycle, reduce and re-use thousands of pounds of electronics, clothing and other items.

Many Kaiser Permanente hospitals have developed innovative programs to recycle blue wrap, the material used to preserve the sterility of medical instruments. The material feels like soft paper but is actually made from heavy-duty polypropylene plastic that can take years to disintegrate in landfills. Blue wrap can be recycled into wash buckets, lawn furniture, flowerpots, squirt bottles, plastic lumber for picnic tables and thousands of other commonly used products.

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### Safely Re-using Medical Devices

Each year Kaiser Permanente reduces medical waste by recycling and safely re-using single-use medical devices (SUDs). This reprocessing avoids millions of dollars in SUD purchasing costs and overall waste disposal costs. Kaiser Permanente's SUD reprocessing is done in strict accordance with U.S. Food and Drug Administration (FDA) regulations to ensure the quality and performance of the reprocessed SUDs are safe and effective for clinical use.

Through a unique partnership with MedShare, a nonprofit organization dedicated to the recovery and redistribution of surplus medical supplies and equipment, Kaiser Permanente is also able to provide much needed supplies to safety-net clinics and underserved health care facilities around the world.

### Purchasing Products High in Recycled Content and Recyclability

Waste reduction creates healthier communities by preserving natural resources and reducing greenhouse gas emissions throughout the lifecycles of the products used. One of the best ways to reduce waste is to purchase products designed to meet rigorous environmental standards that ensure product longevity and end-of-life product management.

Kaiser Permanente requires 100 percent of new laptops, desktops and monitors to be EPEAT (Electronic Product Environmental Assessment Tool) Silver- or Gold-Rated products. In addition, we maintain an extensive system for responsible disposal of hazardous electronic waste. In 2014, we diverted approximately 450 tons of electronic waste from landfills through a partnership with Redemtech, an e-Stewards Certified recycler. Certified e-Stewards recyclers adhere to strict standards for responsible recycling with an aim to protect human health and the global environment. Kaiser Permanente's extensive use of EPEAT standards and our responsible recycling of electronic waste helped us to earn the number one ranking from Computerworld magazine on its list of Top Green-IT Organizations for 2011.

### Building Efficiency into Our Care Delivery System

Kaiser Permanente's electronic medical record system, in use across all of our medical facilities, has dramatically decreased waste across our organization. A recent study published in *Health Affairs* found that comprehensive use of health IT by Kaiser Permanente has avoided paper usage for medical charts, eliminated carbon dioxide emissions, reduced the use of toxic chemicals by digitizing and archiving X-ray images and other scans and resulted in a positive net effect on the environment.

Kaiser Permanente recognizes that the best way to eliminate waste is to avoid creating waste from the beginning. By making use of the "greenest" and most efficient technologies while delivering care that effectively and affordably prevents and treats disease, we embed sustainability into our care delivery model and are able to be better stewards of environmental health for the community.

The following examples illustrate some of Kaiser Permanente's achievements in waste reduction:

- In 2014, we diverted approximately 450 tons of electronic waste from the landfill by recycling or reusing computer equipment via our e-Stewards certified recycler.
- In 2014, we collected approximately 222 tons of medical devices for safe, FDA-approved remanufacturing, avoiding landfill disposal of those devices.
- In 2014, we we avoided sending approximately 292 tons of plastic containers to the landfill by using reusable sharps containers.