WHAT IS HEALTH CARE FOR?

Gary Cohen

Health Care Without Harm

CLIMATE CHANGE AND HUMAN HEALTH

Weather Disasters

Allergies

Infectious Disease
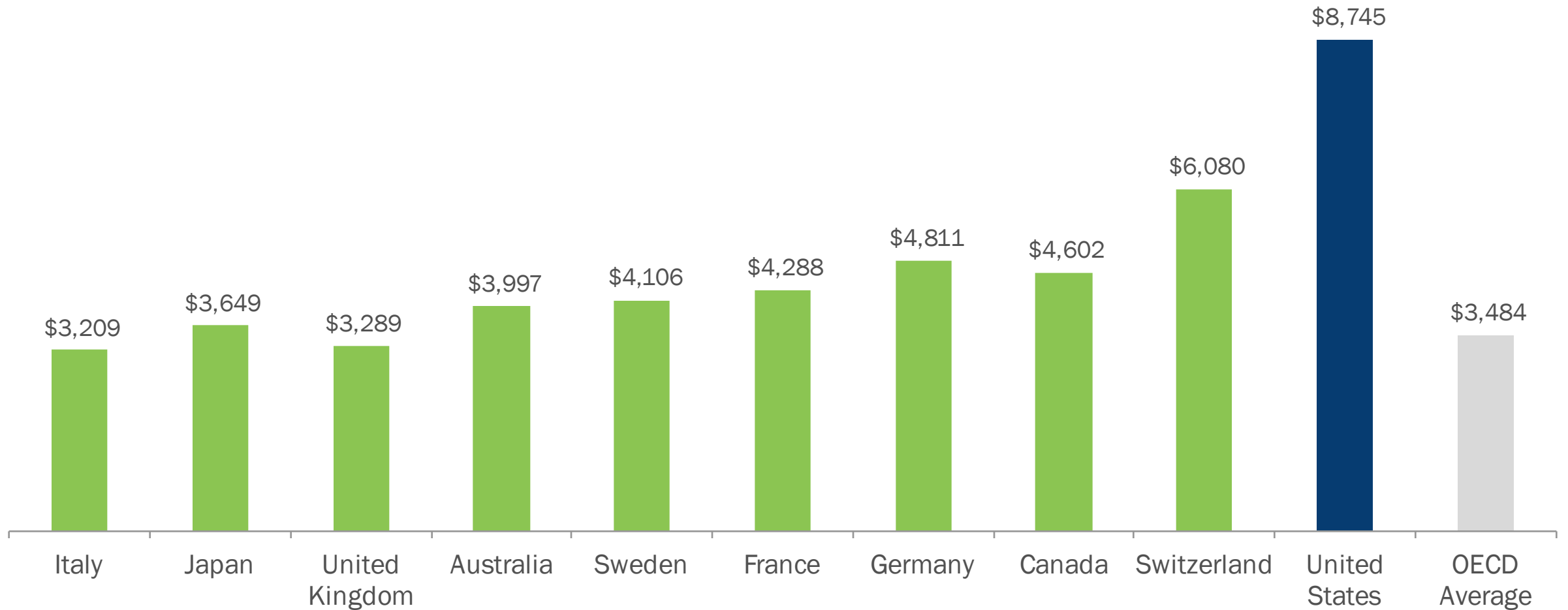

Water Borne Diseases

Heat Stress

Asthma

BURDEN OF DISEASE IN THE UNITED STATES

- By 2030, cancer cases will increase 45% and become the leading cause of death.

- 2/3 of adults and 1/3 of children are overweight or obese.

- 29 million people have diabetes.

- 1 in every 11 children has asthma. Black children are twice as likely to have it than white children.

- 60 million people (10 million children) have a learning disability.

- Heart disease causes 1 in 4 deaths and is the leading cause of death for women.

PER CAPITA HEALTH CARE COSTS

HEALTH CARE'S ENVIRONMENTAL IMPACTS

- **Energy:** Healthcare is the second most energy intensive sector in commercial buildings

- **Medical Waste:** In 1995 medical waste incineration was the largest source of dioxin emissions in the US, responsible for 10% of mercury air emissions

- **Pharmaceutical Waste:** At least 250 million pounds of pharmaceutical waste is generated annually from hospitals and long-term care centers

- **Toxic Chemicals:** Healthcare is one of the largest users of toxic chemicals in the US economy

- **Indoor Air Quality:** Poor air quality has been identified as the most frequent cause of work-related asthma in healthcare workers

- **Unhealthy Food:** hundreds of hospitals serve unhealthy food to their patients and employees

THE PROBLEM

Environmental factors are a key driver in human health outcomes.

Health care itself is a major contributor to the deterioration of environmental health conditions.

- Hospitals are major polluters and energy consumers

- Hospitals are significant users of toxic chemicals

- Hospitals serve food that contributes to diabetes and obesity

THE SOLUTION

Addressing environmental and social factors will scale improvements in health outcomes faster than refining treatment technologies and resources.

The health care sector has a moral obligation, and good business reasons, to be *the* leader in improving environmental health. If health care leveraged the full force of its business and political assets to this end, it could have a substantial and measurable global impact and redefine the way we think about and provide health.

OUR MISSION

Our mission is to transform health care worldwide so that it reduces its environmental footprint, becomes a community anchor for sustainability and a leader in the global movement for environmental health and justice.

HOW WE CREATE CHANGE

Research and Innovation

We identify and pilot opportunities for health care to implement innovative, economical, science-based solutions to environmental health problems.

Implementation and Capacity Building

We educate, build implementation tools, train health care professionals and scale-up solutions across our networks, the health sector and in the communities it serves.

Policy and Market Changes

We aggregate the influence and purchasing power of hospitals, health systems, health professionals and organizations to drive the marketplace toward sustainability and advocate for policies that will create worldwide change.

THE MERCURY CASE

Research and Innovation

- In the 1990's, HCWH identified mercury waste (incineration and breakage of thermometers and blood pressure devices) as a significant source of mercury pollution and health risk to patients and health workers
- Conducted research to identify safer alternatives and business case for switching

Implementation and Capacity Building

- Began work with one hospital in Boston to switch out their mercury thermometers for safer alternatives
- Spread practice to other hospitals in Boston, then to other cities, then to large health care systems and then to pharmacies
- Led 5,000 U.S. hospitals to commit to phasing out mercury-based medical devices
- Documented 5,600 developing country hospitals committed to or already phasing out mercury

Policy and Market Changes

- Convinced all the major pharmacy chains in the U.S. to agree to stop selling mercury devices
- Won a ban on mercury devices in the European Union
- Won national phase outs on mercury devices in Argentina and the Philippines and health system phase outs in Brazil, South Africa, Mexico and India
- Partnered with the World Health Organization and in 2013 secured a global phase out of mercury medical devices by 2020 in the Minamata Treaty

OUR FOCUS AREAS

BUILDINGS
Support green and healthy hospital design and construction

FOOD
Purchase and serve sustainably grown, healthy food

TRANSPORTATION
Improve transportation strategies for patients and staff

CHEMICALS
Substitute harmful chemicals with safer alternatives

PHARMACEUTICALS
Safely manage and dispose of pharmaceuticals

WASTE
Reduce, treat, and safely dispose of health care waste

ENERGY
Implement energy efficiency and clean, renewable energy generation

WATER
Reduce hospital water consumption and supply potable water

OUR NETWORK

NORTH AMERICA
3 organizations and 41 health systems representing the interest of 1400 Hospitals

EUROPE
16 Hospitals, 16 Health Systems and 6 Organizations, representing the interest of 1380 Hospitals and 5029 Health Centers

ASIA
50 Hospitals, 6 Health Systems and 6 Organizations, representing the interest of 5066 Hospitals and 3100 Health Centers

LATIN AMERICA
344 Hospitals, 41 Health Centers, 20 Health Systems and 13 Organizations, representing the interest of 2625 Hospitals and Health Centers

MULTINATIONAL
3 organizations representing the interests of 900 hospitals

AFRICA
11 Hospitals, 3 Health Systems and 1 Organization, representing the interest of 141 Hospitals and 250 Health Centers

PACIFIC
5 Hospitals, 11 Health Systems and 4 Organizations, representing the interest of 66 Hospitals and 497 Health Centers

GLOBAL
As of February 2016, HCWH has 635 members from 34 countries representing the interest of 20,702 Hospitals and Health Centers

OUR IMPACT

MERCURY
- 5,000 hospitals and 23 states
- 14 pharmacy chains
- 28 European countries
- 5,600 developing country hospitals
- Global Treaty

MEDICAL DEVICE REPROCESSING
- Becoming industry standard
- Grew market from $100 million to $500 million growing at 12% per year

MEDICAL INCINERATORS
- 4,500 in 1995; 83 in 2006
- Created demand for reprocessing

RENEWABLE ENERGY/CLIMATE CHANGE
- Hospitals reduced energy use by an aggregate 2.5% over three years, eliminating 73,600 metric tons in greenhouse gas emissions, the equivalent of removing 15,600 vehicles annually from US roads

FOOD
- $72 million redirected to local/sustainable foods
- Created market for antibiotic-free meat in hospitals

GREEN BUILDINGS
- Developed LEED certified standard for hospitals in US; Australia and China adopted as national guidelines
- Enlisted 300 hospital architectural projects onto the framework
- Impacted 40 million square feet of health care construction

HEALTH CARE CLIMATE COUNCIL
- Organized 16 leading US health systems representing $100 billion in revenue
- Council accelerates investment in renewable energy, scales the sector's adoption of resiliency programs and advocates for policies that promote healthy communities

HEALTHIER FURNISHINGS
- Built $50 million worth of market demand for healthier furnishings in health care

OUR POWER

NOW

2020 Health Care Climate Challenge

In six months, we coordinated 75 participants representing more than 9000 hospitals and health centers in 21 countries, committed to reducing their carbon footprint and lending their voice to policy efforts stemming climate change.
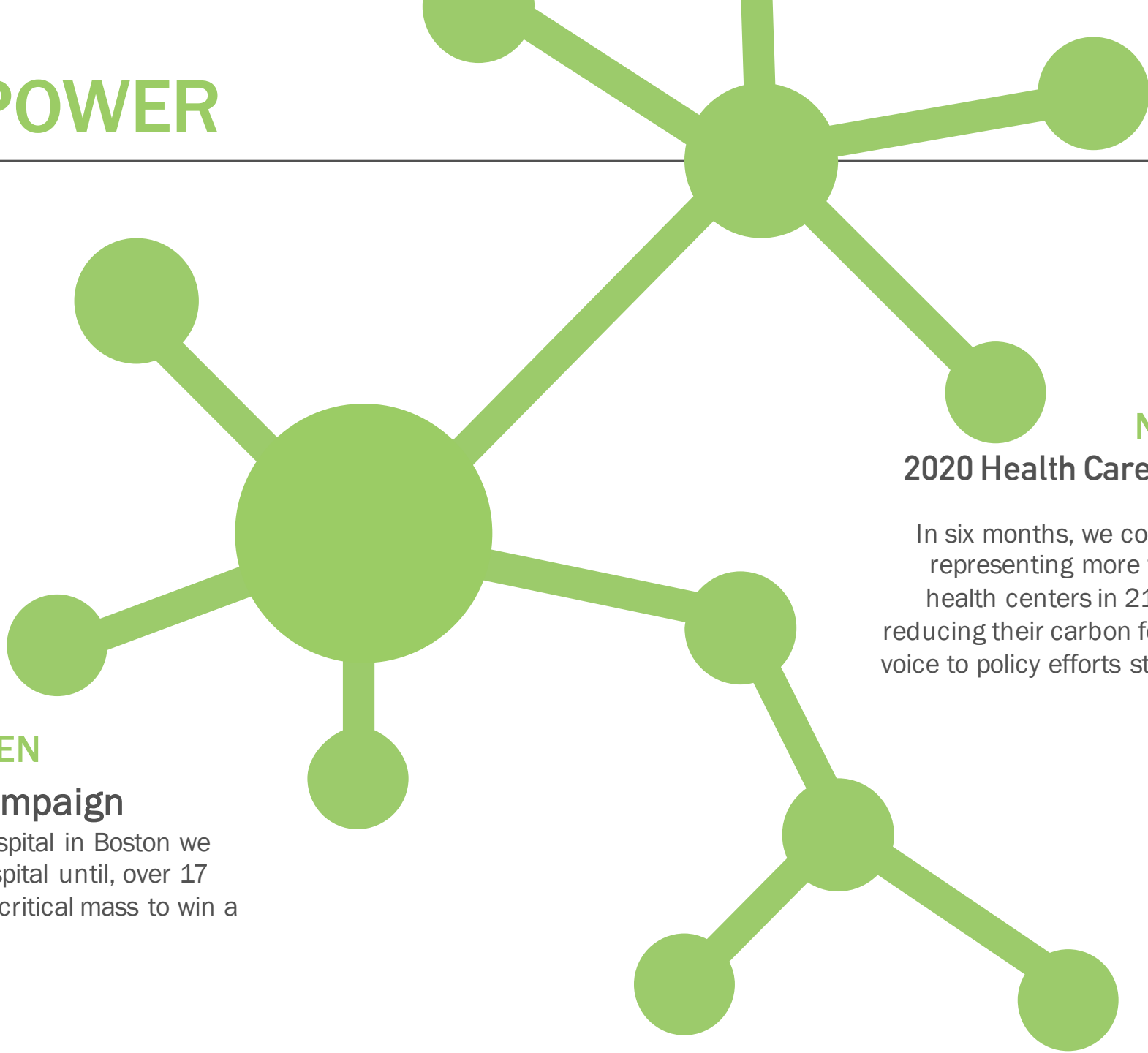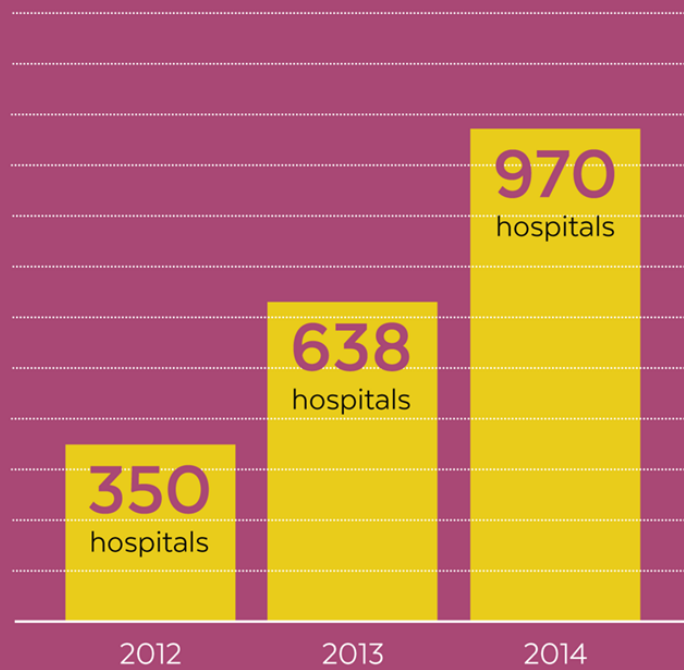
THEN

The Mercury Campaign

Beginning with one hospital in Boston we worked hospital by hospital until, over 17 years, we had enough critical mass to win a global treaty.

Healthier Hospitals

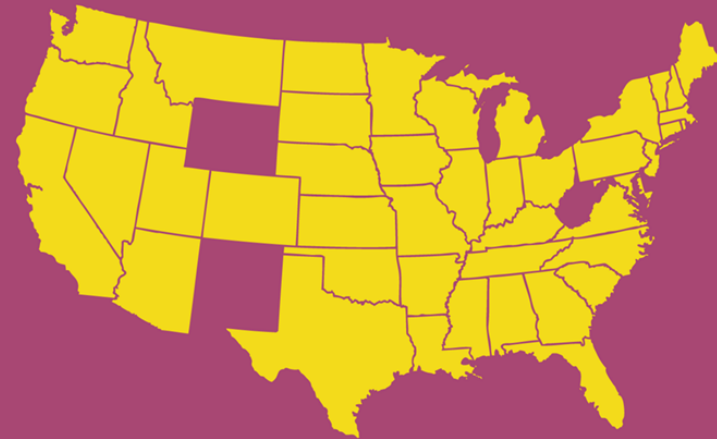**Increased data from hospitals.**

- 2012: 350 hospitals
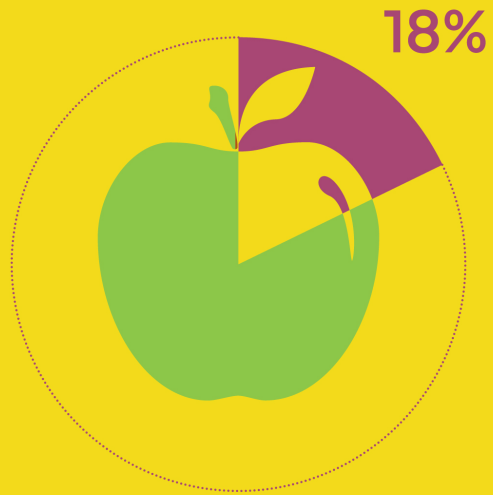- 2013: 638 hospitals
- 2014: 970 hospitals

Leadership: 46 out of 50 states have data represented in the 2014 Milestone Report.

Healthier Hospitals

Local/Sustainable: 146 hospitals spent 18% of their food budget on local and sustainable foods.

18%

Recycling: Since 2010, 457 hospitals achieved an aggregate recycling rate of 24%, diverting 445,722.369 tons of materials from area landfills.

45,000
garbage trucks weight equivalent

Reprocessed SUDs: 379 hospitals have reported spending $174,479,925 on reprocessed single-use devices since 2010.

CALIFORNIA ED-MED COLLABORATIVE: THE POWER OF CROSS-SECTOR AGGREGATED DEMAND FOR HEALTHY, SUSTAINABLY-PRODUCED FOOD

Community of Practice: Develop a sense of community with CEMC participants so they can easily identify common goals, share information on what it will take to achieve them, and then pursue those goals together

Cross-sector Analytics Team: To increase collaborative, institutional procurement of healthier poultry products among CA PK-12 public school systems and hospitals, creating a platform for significant supply chain transformation.

HEALTHY FOOD IN HEALTH CARE:
ANCHORS FOR RESILIENT COMMUNITIES

PRODUCTION	→	PROCESSING	→	AGGREGATION & DISTRIBUTION	→	RETAIL/INSTITUTIONAL MARKETS	→	FOOD SERVICES
Farms, ranches, and fishing boats		Processing plants, slaughter-houses, and dairies		Warehouses, trucks and other infrastructure				Mobile food vendors and commercial kitchens

LOCALIZING THE FOOD ECONOMY

1) Aggregate demand for healthy food products

2) Increase community access to healthy foods

3) Create jobs for community residents

4) Increase markets for local producers

Emerald Cities COLLABORATIVE
America empowered.

DEMOCRACY COLLABORATIVE

GREENHEALTH EXCHANGE: TRANSFORMING MARKETS

GX is a purchasing cooperative focus on:

- Accelerating the adoption and use of safer, greener products by leading healthcare systems

- Catalyzing innovation in next generation product development

- Inspiring similar action in other sectors

OUR FOUNDING MEMBERS

- Dartmouth Hitchcock

- Dignity Health

- Gundersen Health Systems

- Partners HealthCare

- Practice Greenhealth

HOW IT WORKS:
IDENTIFY PRODUCT AND SERVICE CATEGORIES BASED ON CURRENT SPEND

FOOD AND FOOD SERVICE PRODUCTS

Dietary Paper and Wares

Meat

Beverages

Dairy

Fresh Fruits

Fresh Vegetables

Oil and Shortening

Grains and Legumes

Canned Foods

Ware Washing Products

Enteral Nutrition

CHEMICAL OF CONCERN AND FLAME RETARDANT-FREE FURNISHINGS

Office Furnishings

Public and Waiting Area Furnishings

Examination Room Furniture

Surgical Suite Furnishings

Preliminary List for Discussion Only

HOW IT WORKS:
IDENTIFY PRODUCT AND SERVICE CATEGORIES BASED ON CURRENT SPEND

ADMINISTRATIVE AND OFFICE PRODUCTS

Green Office Products "Bundle" 400 Products

100% Recycled Paper Products

Envelopes

File Folders and Related Products

Ink and Toner

MEDICAL PRODUCTS AND DEVICES

Respiratory Therapy Products

I. V. Fluids and Administration

Bedside Procedure Trays

Disposable Diapers

Disposable Under-pads, Briefs and Diapers

Table Papers and Covers

Patient Drapes

Sharps Collection

Chest Drainage

Urinary Products

Preliminary List for Discussion Only

HOW IT WORKS:
IDENTIFY PRODUCT AND SERVICE CATEGORIES BASED ON CURRENT SPEND

BUILDING MATERIALS

Paint

Carpet

Wall Covering

Flooring

Cooling Towers

HVAC Systems and Services

Headwalls

Lighting

Roofing

Water Treatments

Ceiling Tiles

Cabinetry

Patient Hand Rail Systems

Windows and Doors

HOUSEKEEPING AND BUILDING MAINTENANCE PRODUCTS

Cleaners

Hand Cleaners

Floor Finishes and Related Products

Towels

Tissues

Batteries

Bedside Bags

Trash Can Liners

Mattresses

Textiles

Preliminary List for Discussion Only