



Health Care Facts

Overview

- Government estimates are that managing chronic diseases in the U.S. population consume approximately 75 percent¹ of all health care expenditures.
- Chronic illnesses cost the US 1.3 trillion a year²
- Hospitals are the second most energy intensive buildings in the United States, using 836 trillion Btu of energy annually³ and generating significant greenhouse gas emissions.
- Health facilities are also significant water consumers, and create 6,600 tons⁴ of waste per day.

Purchasing

- The combined purchasing volume for healthcare group purchasing organizations in 2010 was estimated at \$110 Billion, a 31 percent increase over 2009.⁵

Chemicals

- In 2002, health care spent over \$106 billion in direct purchases of chemicals and chemical products, more than double the amount spent by the second largest consuming industry sector.⁶

Food

- The US spends \$147 billion⁷ each year to treat obesity, \$116 billion⁸ more to treat direct costs of diabetes, and hundreds of billions more to treat cardiovascular disease and cancer that many suspect are related to the Western diet.
- Globally, livestock for meat and dairy production is estimated to contribute approximately 18 percent⁹ of total greenhouse gas emissions, and runoff from animal farms and fertilized fields are polluting waters

Energy

- The health care sector spends about \$6.5 billion¹⁰ on energy each year, and that number is increasing.

Water

- A water use study published in 2002 showed a range of water use from 68,750 to 298,013 gallons¹¹ per year per bed for hospitals in the size range of 133 to 510 beds.
- System-wide conservation practices have been shown to cut water use by 20 to 30 percent¹²—which can mean a savings of up to \$100,000 a year for some facilities.

Waste

- The nation's hospitals generate approximately 6,600 tons¹³ of waste per day. With waste disposal costs up to \$68 per ton¹⁴, and an estimated annual health care cost of solid waste disposal at approximately \$15 billion annually, disposal of solid waste greatly adds to the hospital operating budget.
- Burning of medical waste generates a number of hazardous gases and compounds, including hydrochloric acid, dioxin/furan, and the toxic metals lead, cadmium, and mercury. The disposal of solid waste produces greenhouse gas emissions, including methane, a greenhouse gas 21 times more potent than carbon dioxide. By reducing

waste, hospitals not only avoid disposal costs and environmental hazards, they reduce the amount of raw materials, energy, and processing needed to replace the used products.¹⁵

Pharmaceuticals

- Today, pharmaceutical waste can be found in trace amounts in soil and groundwater throughout the world. This waste comes from a variety of sources, including hospitals, whose pharmacies stock between 2,000 and 4,000 different items.¹⁶

Transportation

- One report found that people with reliable access to healthcare visited their doctor 2.29 times more frequently for serious illness and 1.92 times more frequently for regular checkups than those who did not.¹⁷

Footnotes

¹http://www.healtheducationadvocate.org/factsheets/chronic_disease_factsheet_2009.pdf

²<http://www.cbsnews.com/stories/2007/10/03/health/webmd/main3324881.shtml>

³Department of Energy, US Energy Information Administration (EIA) Commercial Buildings Energy Consumption Survey

⁴<http://cms.h2e-online.org/ee/waste-reduction/>

⁵<http://peasnerhealthcare.com/GPO2010Outlook.html>

⁶ Wilson, M., "Green Chemistry in California: A Framework for Leadership in Chemicals Policy and Innovation," California Policy Research Center, University of California, 2006, <http://coeh.berkeley.edu/FINALgreenchemistryrpt.pdf>.

⁷ July 27, 2009, teleconference with: Thomas R. Frieden, M.D., M.P.H. director, U.S. Centers for Disease Control and Prevention; Eric Finkelstein, Ph.D., director, RTI Public Health Economics Program, Research Triangle Park, NC; William H. Dietz, M.D., Ph.D., director, Division of Nutrition, Physical Activity, and Obesity, U.S. Centers for Disease Control and Prevention; July 27, 2009, *Health Affairs*, online. (<http://abcnews.go.com/Health/Healthday/story?id=8184975&page=1>)

⁸ US Centers for Disease Control and Prevention (2007) <http://www.cdc.gov/diabetes/faq/research.htm>

⁹ UN Food and Agriculture Organization, *Livestock's Long Shadow*, 2006 (<http://www.fao.org/docrep/010/a0701e/a0701e00.HTM>)

¹⁰Energy Star, Health Care: An Overview of Energy Use and Energy Efficiency Opportunities (www.energystar.gov)

¹¹Practice Greenhealth Green Guide for Health Care Series – Water Conservation Strategies

¹²Practice Greenhealth Member Case Studies, 2009.

¹³<http://cms.h2e-online.org/ee/waste-reduction/>

¹⁴ 2000, Joint Commission on the Accreditation of Health Care Organizations, <http://cms.h2e-online.org/ee/waste-reduction/>

¹⁵<http://epa.gov/climatechange/wycd/waste/generalinfo.html>

¹⁶[http://www.practicegreenhealth.org/page_attachments/0000/0102/PharmWasteBlue
print.pdf](http://www.practicegreenhealth.org/page_attachments/0000/0102/PharmWasteBlueprint.pdf)

¹⁷[http://t4america.org/blog/2009/07/17/improving-access-to-healthcare-by-improving-
transportation-options/](http://t4america.org/blog/2009/07/17/improving-access-to-healthcare-by-improving-transportation-options/)