



Maryland
Green Registry
MEMBER

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

Luminis Health



LH Anne Arundel Medical Center
LH Pathways and LH McNew
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Annapolis, Maryland 21401
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<https://www.luminishealth.org/en/environmental-sustainability>

Non-profit, community hospital
Member since October 2011

Management and Leadership

Environmental Team

Luminis Health E.A.R.T.H. Advisors (Environmental Action Relates to Health) is VP-sponsored, multi-disciplinary team that meets quarterly to evaluate and identify environmental factors and conditions that affect human health and works towards understanding how our community is impacted. The team helps support solutions, improvements and provides mitigation of issues affecting our staff, patients, community, and families who have put their trust in us.

The Luminis Health (LH) E.A.R.T.H. Advisors are dedicated to 3 primary principles:

- 1. Protecting the health of our building occupants.*
- 2. Protecting the health of our local environment.*
- 3. Protecting the health of our global community.*

Environmentally Preferable Purchasing

Purchasing decisions impact the health of our building occupants in all aspects of our organization. Our Supply Chain is committed to ensuring sustainable practices to eliminate harmful toxic exposures, increase reusable products and support the movement towards decreasing impact on our planet.

- *Converted 85% of the cleaning chemicals to Green Seal™ certified cleaners.*
- *Reduced the use of mercury-containing instruments to near zero. We also have a restriction on paints and adhesives with high VOC (volatile organic compound) levels and we have successfully transitioned to microfiber mops which clean more effectively and require fewer cleaning products.*
- *Eliminated formaldehyde-free infant bath wash and moved towards more DEHP-free tubing.*
- *Decreased use of disposable pillows, purchasing and managing a reusable pillow inventory continues the commitment to fewer single-use items.*



Environmental Restoration and Community Environmental Projects

Community partnerships and engagement opportunities are important aspects of the E.A.R.T.H. Advisors work. Annually, the team brings environmental outreach and learning opportunities to all Luminis Health staff. Volunteering and connecting with local organizations to plant trees, restore wetlands and clean up trash makes a tangible positive impact on the environment as well as promotes a better connection between the work LH does internally and the impact on our community. We are proud partners with the Alliance for the Chesapeake Bay, Arundel Rivers Federation and the South River Association.

Our hospitals offer healthier menus, work with farmers to purchase locally and sustainably grown products, offer plant-forward menus, and foster community partnerships to help meet the food needs of the community.

Luminis Health began operating an annual on-campus farmers market in 2010 at our LHAAMC campus. In 2017, the market expanded to increase community outreach and became one of the first farmer's markets in Anne Arundel County to accept SNAP and provide a matching dollar market money program to the community. Continuing the commitment to supporting local resources, the market expanded to the LHDCMC campus in 2020.

Waste



Solid Waste Reduction and Reuse

Waste in healthcare is a complex situation. Luminis Health works to evaluate its waste stream, segregate, and reduce waste, and choose reusable products through remanufacturing and reprocessing as part of our strong commitment to the environment.

- *Luminis Health partners with an FDA-approved, 3rd party vendor to begin a remanufacturing and reprocessing program. Many items approved by the FDA for multiple use but packaged by the manufacturer as “single-use” are now collected. Over a third of our cost savings is in the collection and reprocessing of pulse oximeter probes! This program has reduced our waste and minimized our environmental impact, while saving significant financial resources.*
- *Reusable Sharps Containers: We participate in a reusable sharps program. These reusable containers can be reused over 500 times, greatly reducing the number of plastics being sent to the incinerator, and the air emissions, including dioxin, which is released when plastic is burned.*
- *Surplus Supply Global Donation Program: When possible Luminis Health donates supplies that the hospital can no longer use. These supplies, while no longer useful for us, still had lots of life in them. Throughout the years we have donated over 12 tons of surplus medical supplies to hospitals in need globally. The additional local benefit is seen in waste diversion, ordinarily these items end up in landfills or incinerators. We are especially proud of our efforts to support global needs and reduce our impact on our local environment.*



Hazardous Waste/Toxic Use Reduction

Exposure to toxic substances can cause harm. Luminis Health provides annual comprehensive chemical evaluations throughout all entities supporting our efforts to work towards the elimination of harmful chemicals and reduce hazardous health exposures.

- *2007, LHAAMC became the first tobacco-free hospital campus in Maryland. In 2014, we became the first hospital to implement tobacco-free hiring.*
- *2016, LHAAMC is awarded the Integrated Pest Management (IPM) in Health Care Award by Maryland Pesticide Network and Beyond Pesticides, for their work in using less toxic pest control methods.*
- *2018 - Toxic Matters – Simple Steps to a Healthier Home brochure was created in conjunction with the University of California San Francisco educational outreach to develop local impact information to be provided through the Women’s and Children departments at LHAAMC to support a decrease in chemical exposures and improved health outcomes.*
- *2020 – LH Implemented a Pharmaceutical Waste collection program to support a “Zero Drain” philosophy ensuring that no pharmaceutical waste can reach our local watershed.*

- *2021 – aerosol collection program implemented to increase waste segregation and safe disposal for increased community health and reduction of hazardous materials.*
- *2022 - Our work with waste anesthetic gas (WAG) reduction crosses multiple departments and is a great example of how we leverage our E.A.R.T.H. Advisory team to expand education of environmental issues in healthcare, bring key stakeholders together to provide increased focus on the issue, develop new processes, policies, and lead change. By decreasing harmful anesthetic gasses, we provide a positive impact on our GHG emissions and highlight the importance of potential harmful exposures for our post-anesthesia care unit (PACU) staff members.*

Energy

Energy Efficiency

Conserving our energy usage will help improve our health. It is estimated that 80% of the US greenhouse gas emissions are directly related to the production and use of energy. Decreasing our contribution of emissions of greenhouse gases will help slow climate change. We work to eliminate the negative health and climate impacts of our energy consumption while enhancing patient outcomes and minimizing costs.

- *All building projects are designed to achieve or exceed LEED standards to reduce energy consumption.*
- *We utilize sustainability software to track energy and waste data to manage programs, goals and initiatives.*
- *High-efficiency LED lighting is used in our operating rooms to reduce heat and electrical load.*
- *LED Lighting conversion projects throughout our campuses and over the years have resulted in a reduction in electrical usage.*

LHAAMC installed exterior windows with a high glass glaze and high efficiency fluorescent light fixtures. These programs alone are estimated to reduce energy use by 14%.

When built, the Hospital South Tower achieved an 18-20% reduction in energy consumption when compared to standard basic designs. The HVAC system includes high efficiency chillers and chiller plant controls. A high-efficiency dehumidification system (Cool Dry Quiet) was installed in the eight new operating rooms to ensure stringent conditions are met while minimizing energy

use. The concrete used for the multi-level parking garage has a solar reflectance index (SRI) rating of 44, greater than the SRI 29 rating required by LEED and the roof surface is composed of a 16,700 square foot vegetative roof, as well as a heat-reflective, energy efficient roofing thermoplastic polyolefin (TPO) roofing system with an SRI of 78.

In 2014/2015, we were awarded 5 grants for the garage lighting project. One for each garage. The lights in all four garages on the AAMC campus were converted to LED, which resulted in a reduction electrical usage by 62.3% or 1.97M kwh/year. This translates to a savings of over \$200k in current dollars.

Renewable Energy

LHAAMC secured a \$2.3M grant from BG&E and MEA for CHP. The project will move forward in in 2023. The project is intended to be completed within two years.

LH McNew, purchased green energy credits for two years, equivalent to 20% of the total electrical loads at the facility.

Water

Water Conservation

The new Hospital South tower was designed and built to achieve 33% increased water conservation than the baseline-calculated building. This will be achieved by incorporating low flow plumbing fixtures into all showers, toilets, faucets, and sinks ensuring water efficiency.

Stormwater Management and Site Design

Step ponds have been designed to treat storm water runoff and remove pollutants before they reach the Cowhide Branch; a stream alongside LHAAMC's campus that eventually leads to the Chesapeake Bay.

LH AAMC's 16,700 square-foot green roof also offers hydrological benefits, including minimizing water runoff and filtering dust particles from the atmosphere before reentering the Chesapeake watershed. Eight nurseries provided over 24,000 plantings for the Anne Arundel campus and approximately 80% of the planting was grown within the local region.

To meet the parking needs of our growing campus, garages were constructed instead of flat, open parking lots, saving an additional 1.4 million square feet or 40 football fields of impervious surface.

Transportation

Employee Commute/Customer Travel

LH AAMC, in 2017, was named a Bronze [Bicycle Friendly Business](#) by the League of American Bicyclists. We were the first healthcare organization in Maryland and the first business in Anne Arundel County to receive the BFB designation.

[Wheels of Hope](#) –In 2018, working with community stakeholders we identified a gap in transportation options and began collecting and refurbishing bicycles to provide reliable climate-friendly solutions. Bikes are donated throughout Anne Arundel County and provide direct support to LH Pathways clients.

Efficient Business Travel

In 2022, a pilot survey was implemented to quantify staff reduction in emissions due to remote/telecommuting impact on the environment and cost savings. The goal of the survey is to embrace better Scope 3 data collection to increase accuracy of carbon emission reduction goal reporting.

Green Building

LEED Gold

LHAAMC South Hospital: In 2010, is the first Maryland hospital to be LEED Gold certified acute care pavilion. LHAAMC completed a major expansion in April 2011 including new emergency rooms, eight operating rooms and multiple levels of in-patient care units.

Sixth Floor of LHAAMC: In 2016, a build-out of the 6th floor at LHAAMC also received LEED Gold certification.

Luminis Health J. Kent McNew Family Medical Center: In 2021, Luminis continued the commitment to green building and awarded the LEED Gold certification.

Environmental Certification Programs, Awards, and Other Activities

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Maryland Hospitals for a Healthy Environment (MD H2E) 2010 Trailblazer Award for LEED design and construction.

U.S. Green Building Council, Maryland 2021 [Community Leader Award](#) for the J. Kent McNew Family Medical Center

U.S. Green Building Council, Maryland 2010 Wintergreen Award for New Construction

Maryland Hospitals for a Healthy Environment (MD H2E) 2011 Trailblazer Award for Greening the Surgical Services.

Maryland Hospitals for a Healthy Environment (MD H2E) 2012 Trailblazer Award; Nursing Leadership in Environmental Health

2014 Anne Arundel County Public Schools "Distinguished Stakeholder Award"

[2015 Becker's Hospital Review Top 50 Greenest Hospitals in the US](#)

Profile Updated June 2023



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SUSTAINABILITY
LEADERSHIP AWARD WINNER
2023



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