

# NORTH BIRMINGHAM MATTERS



## Students Learn Life-Saving Skills Through CPR Training at G.W. Carver High School

Every year, 356,000 people in the US suffer from cardiac arrest, and sadly, 90% of them don't make it. But, there's hope if you know what to do. The American Heart Association recommends timely and effective CPR, and how to use a defibrillator (AED). They also suggest a *Chain of Survival* that includes recognizing the signs of cardiac arrest, calling for help, giving chest compressions, and using an AED.

Recently, the UAB Superfund Research Center partnered with GoRescue, an organization that provides Basic Life Support (BLS) training, and G.W. Carver High School to offer training to a group of 12 junior and senior students through the Lung Ambassador Program. The students received hands-on training in CPR, ventilation, and the use of AEDs, and their certification is valid for two years.

Not only did the students learn valuable skills, but they also left feeling really good about themselves. The students' feedback was overwhelmingly positive. One student said, "CPR training has shown me how to save the life of someone who isn't breathing. I am very

appreciative of the opportunity that I had to learn a skill that could save someone's life." Another student, who wants to be a pediatrician, said, "I learned how to do CPR on children. This excited me to experience something that I can use someday in my profession and to help anyone who might need it."

BLS training not only provides valuable skills that could save lives but also instills confidence and a sense of accomplishment in those who take the course. As one student put it, "CPR training was a fun learning experience. I learned so much, like the different compressions on adults, kids, and newborns. This was a great opportunity for me since I will be going to school for nursing. I'm thankful that I have this skill to save someone's life."

BLS training is an essential skill that everyone should have, and the Lung Ambassador Program is an excellent way for high school students to learn it.

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## UAB Superfund Research Center to Study Folic Acid's Potential in Protecting Residents from Arsenic Exposure in North Birmingham

Attention North Birmingham Residents: Help us protect your health and your community! Did you know that active coke plants, coal furnaces, and steel mills in your area are contaminating the air and soil with arsenic? Long-term exposure to this natural chemical has been linked to cancers, lung disease, heart disease, and brain disorders. But we want to help you fight back!

As part of our commitment to protecting your health, the UAB Superfund Research Center is conducting a study to see if folic acid (vitamin B9) can help protect you from arsenic. Folic acid is safe and recommended for pregnant women, and studies have shown that it can increase the removal of arsenic from the body via urine.

We're looking for 100 participants from Acipco-Finley, Collegeville, Fairmont, Harriman Park,

Hooper City, and North Birmingham to join us in this important study. You'll receive either folic acid or a placebo for 90 days, and we'll test your blood and urine samples for arsenic levels before and after the study to see if folic acid helps increase arsenic removal from your body.

But that's not all! After the study, all participants will have access to a further 90-day supply of folic acid to continue protecting themselves from arsenic exposure. Plus, we'll reimburse you for enrolling in the study.

This is a unique opportunity to take control of your health and contribute to important research that can benefit your community. Don't miss out – sign up for the study today!

Must be 18 years or older, and speak English  
In exchange for your time and participation, you will receive a \$25 gift card. Participation is voluntary. **Call (205) 934-5555 or email us at [LungHealth@uabmc.edu](mailto:LungHealth@uabmc.edu) for more information.**

## UAB Researchers Discover How Cadmium Pollution and Infection Cause Lung Inflammation in Mice



Cadmium is a poisonous heavy metal that is often present in air pollution from sources like coal-fired plants, coke factories, and forest fires. This type of pollution is linked to respiratory infections, including flu and pneumonia. This study, led by UAB Pulmonary researchers Jennifer L. Larson-Casey, Ph.D., and A. Brent Carter, M.D., focuses on the North Birmingham community in Alabama, owing to the presence of heavy metals, particularly cadmium, in the soil and air, which have been linked to the prevalence of lung disease.

Extracellular signal-regulated kinase, or ERK, is an enzyme that plays a role in lung inflammation and injury, but how it works was not known. Drs. Larson-Casey and Carter used mice to study how cadmium and a bacteria called *S. pneumoniae* affect immune cells in the lungs called macrophages. They found that these substances impair PAR-gamma from working properly in the macrophages, which worsens inflammation. The study focused on immune cells that fight respiratory pathogens and should become anti-inflammatory once the disease is controlled to prevent lung tissue damage.

Understanding this mechanism presents an opportunity for developing treatments to mitigate lung damage and prevent mortality.



## ARMS Welcomes Dr. Greer as CEO: A New Partner in the Fight Against Health Disparities

In an exciting announcement, the Board of Directors of Alabama Regional Medical Services (ARMS) has appointed Dr. Thomas “Ted” Greer, Jr., as its new Chief Executive Officer, effective December 5, 2022. Dr. Greer brings with him an impressive 38 years of experience in the non-profit sector, including serving on the boards of some of the most prominent local and national health care and health organizations such as the Health Council of South Florida, American Heart Association, American Cancer Society, and the American Lung Association.

He holds a Doctorate degree in Ministry and is an ordained member of the clergy with extensive experience leading community health and faith-based prevention collaboratives, reducing health disparities, and improving health outcomes. Dr. Greer has a successful track record in behavioral health, homelessness, community health, child welfare, and youth and family services.

During his eight-year tenure at Health Choice Network (HCN), a Federally Qualified Health Center Controlled Network, Dr. Greer led the community and faith-based engagement efforts of HCN’s Jessie Trice

Cancer Prevention Project (JTCCP), which aims to reduce health disparities among low-income African-American and Hispanic women. The program, which has been operational since 2001 and focused on breast cancer and cervical cancer since 2005, employs a multifaceted approach toward early detection and diagnosis of cancer, leveraging partnerships among faith- and community-based organizations. By linking community health centers with other community organizations, including 100 faith-based organizations, cancer centers, health departments, and tertiary services, JTCCP facilitates access to health care resources, provides communication to patients about breast and cervical cancer screening guidelines, addresses patients’ misconceptions regarding cancer and cancer screenings, and leverages community and social networks of women to strengthen screening efforts.

Dr. Greer is eager to participate in community participatory research efforts based in Birmingham, Alabama, that align with ARMS’ mission and will lead to reducing health disparities and improving health outcomes for enrolled patients. He believes that ARMS, as a premier Federally Qualified Health Center, is the ideal community partner for such initiatives.



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# UAB SRC

North Birmingham Matters wants to share  
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