

# Climate Conversations

## The Wheels on the Bus go ‘Round and ‘Round – Transitioning to Electric School Buses

Authors: Jessica Varghese, PhD, RN; Pamela Ginex, EdD, MPH, RN, OCN; Celia McIntosh, DNP, RN, FNP-C, PMHNP-BC, SCRNP, CNRN, CEN, CCRN



Today, most school buses in New York run on diesel fuel. New York State legislature has made a historic decision to transition the entire state school bus fleet to zero-emission buses by the year 2035. This article will share how this movement will impact the health of our state.

### Health and Diesel Exhaust

It is well known that diesel exhaust is dangerous – in 1989 diesel exhaust was listed as a probable human carcinogen. Diesel exhaust puts kids at increased risk for serious conditions like asthma – the leading cause of chronic disease related school absenteeism in the United States. We also know that children, with their lungs still developing, are particularly vulnerable to these health effects. Diesel exhaust causes increases in asthma and respiratory illness and affects academic and athletic performance. Children who are exposed to diesel exhaust from riding in a bus 180 days a year for 10 years (about what a typical child would be exposed to)

results in 23-46 additional cancer deaths per 1 million children.

There is no known safe level of exposure to diesel exhaust.

### Disproportionate Burden

Students from Black households, low-income students and students with disabilities are all more likely to ride the school bus than their counterparts, meaning more exposure to diesel fumes. They also live closest to high truck traffic areas and highways and are exposed to higher levels of air pollution. Living in places with poor air quality only compounds this problem – which includes the most vulnerable in our communities.

### The Role of the School Nurse

For school nurses, this transition is a major step forward in their ongoing efforts to protect and promote the health of students. Diesel exhaust from traditional school is linked to severe health conditions, particularly asthma, which remains

the leading cause of school absenteeism related to chronic disease in the United States. This reality underscores the critical role that school nurses play in addressing respiratory conditions that are exacerbated by exposure to diesel fumes. By reducing students' exposure to harmful emissions, electric school buses can contribute to lower asthma rates and improved overall respiratory health among students. School nurses, who are often on the front lines of managing student health issues, will likely see a decrease in the number of cases related to air pollution exposure, enabling them to focus more on preventive care and other health needs.

While most of the research on health from diesel school bus exhaust has focused on children, they are not the only ones at risk. Bus drivers, school staff, and parents are also at risk (particularly pregnant drivers, staff and parents). Bus drivers spend several hours a day driving and school staff are in the bus lines at pick up and drop off while the buses are idling. Parents can also be exposed when with their children near the buses.

### The Impact on Parents

For parents, particularly those from Black, low-income, and disabled communities, the shift to electric school buses represents a crucial step towards health equity. These populations are disproportionately affected by diesel exhaust due to their higher likelihood of using school buses and living near high-traffic areas. The move to zero-emission buses ensures a healthier environment for all students, especially those most vulnerable to the detrimental effects of air pollution. Parents can feel reassured that their children are riding to school in a safer, cleaner en-

vironment, reducing their risk of developing chronic health issues that could hinder their academic performance and overall quality of life.

### Implications to Practice

We have the technology to move to electric buses and save the health and well-being of our children. And, parents support moving to cleaner, less harmful methods of transportation. More than 50% of parents are worried about their kids being at risk from exhaust fumes and 54% think EVs should replace older school buses. We have funding and support to move to school transportation that won't harm our children – now is the time to make this change.

The transition to electric school buses in New York State, driven by recent voter support and state legislation, holds significant policy implications. As the state moves towards converting its entire school bus fleet to zero-emission vehicles by 2035, school nurses and parents must recognize the profound impact this shift will have on student health and well-being.

The financial implications of this transition also cannot be ignored. The availability of funding through federal programs like the EPA's Clean School Bus Program (CSBP) and state initiatives such as the NY School Bus Incentive Program makes the shift more accessible for school districts. Parents and school nurses alike should ad-

vocate for their districts to take advantage of these opportunities to ensure that their communities benefit from this transition.

By switching to zero-emission electric buses, we can promise a healthy ride to school for students. There are widespread public health impacts to clean school bus standards. In conclusion, the move to electric school buses in New York is a pivotal moment for public health, with significant implications for school nurses and parents. ■



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