

Maryland Senate Bill 0841 Testimony
Stephan Levitsky, Vice President of Sustainability at Perdue Farms

Perdue is in opposition to this bill and urges an unfavorable committee report. We believe the bill is not needed and would negatively impact the economy of Maryland, the ability for farmers to be profitable, and have no added benefit to the environment.

We are perplexed for the reasoning for this bill. There is no substantive information supplied by the Legislature as to why this bill was proposed. We can only assume it is related to past bills around the environment. As such, we will make our response direct to those previous concerns.

Poultry Litter and Phosphorus in soils

The phosphorus management tool (PMT) was developed and put into law in Maryland 5 years ago. Maryland Department of Agriculture has implemented each step of the process. The PMT Committee had to make a recommendation to the Governor whether to postpone the implementation of PMT this in December of 2019. Perdue publicly stated that we were not in favor of a delay and wanted the implementation to go as originally laid out in the Law.

What PMT also found was a much smaller amount of acreage impacted in regard to phosphorus than what was originally thought by some environmental groups.

So, if this bill is regarding poultry litter and PMT, we recommend allowing the Law that is already in place to move forward and the industry and farmers will identify ways to address an excess of litter if there is indeed excess litter.

Organic Farms

This bill will be severely detrimental to the industry as a whole, but even the smaller organic farms will be negatively impacted. 300,000 chickens/year is equivalent to approximately 1 to 2 chicken houses. Our organic farms in the State of Maryland average 4 houses per farm. Our organic farmers build these houses to not only grow chickens, but to also have organic fertilizer to put on their organic grain and vegetable farms. By reducing their ability to expand and/or develop new farms, especially down to this small size would negatively impact organic farming in the state of Maryland.

Healthy Community Air Act

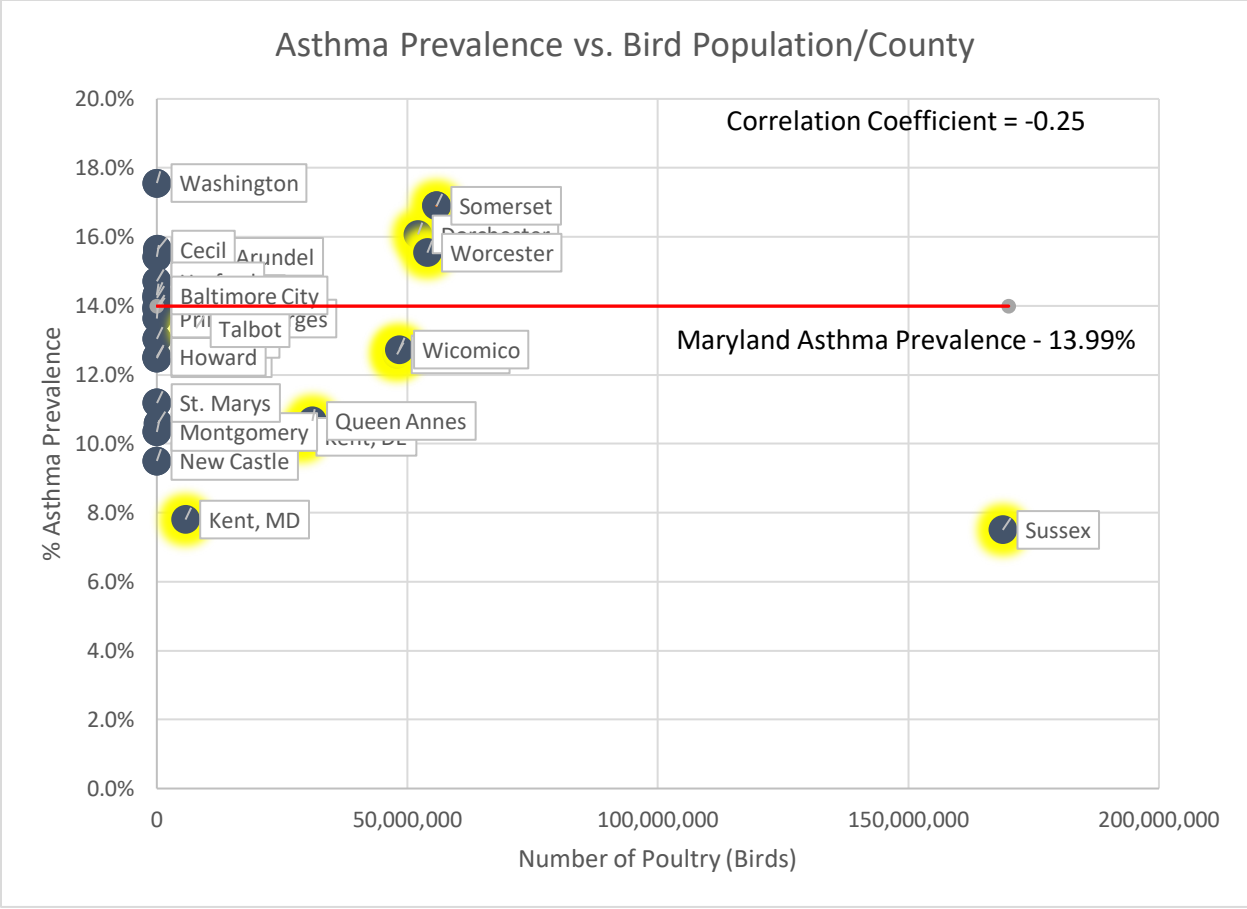
This bill was brought forward the last three years, and has been brought forward again. Several groups have pushed this bill both from an environmental perspective and a health perspective. We believe we have shown the lack of evidence in either case. Also, Delmarva Poultry Industry, Maryland Department of Environment and The Campbell Foundation have an Memorandum of Understanding (MOU) to sample air for ammonia and particulate matter on the Western and Eastern Shore of Maryland. These sites have been constructed. Let's allow the data to be collected to verify if there is indeed a need for concern.

In addition to the MOU and sampling, Chesapeake Bay Foundation conducted their own study and did not find ammonia above health standards anywhere they sampled – 22 locations around the Eastern Shore of Maryland with the highest reading obtained from downtown Easton, MD.

Our previous testimony regarding the Healthy Community Air Act is documented below.

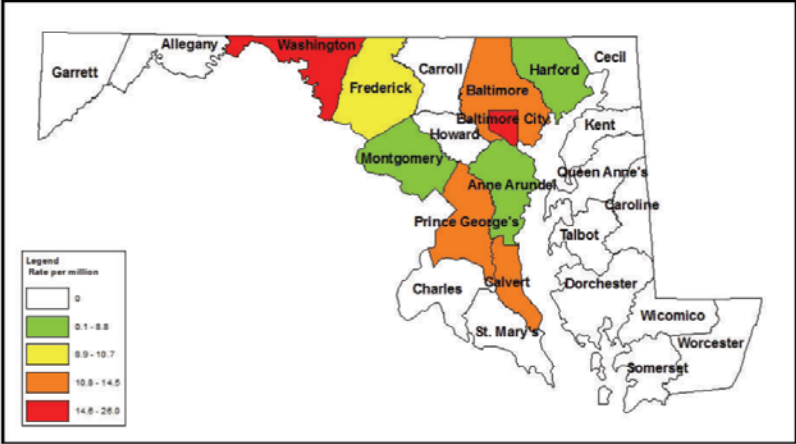
1. Multiple air sampling, modeling and various air emission studies that are relevant to this issue have already been conducted. This includes EPA/State agency air emission data (Dorchester, MD, Kent, MD, and Sussex, DE), Chesapeake Bay Program (CPB) air emission modeling, and extensive studies of poultry house fan emissions conducted by University of Georgia, University of Delaware and other Universities.
 - Maryland Department of the Environment (MDE) is monitoring air quality in Dorchester and Kent Counties, which have high densities of poultry houses on the Eastern Shore (approximately 60 million birds/year combined).
 - The 24-hour Environmental Protection Agency (EPA) National Ambient Air Quality Standard (NAAQS) for Particulate Matter (PM) 2.5 - 35 $\mu\text{g}/\text{m}^3$ was never exceeded between 2012 to 2017. The highest reading for Dorchester County was 25.5 $\mu\text{g}/\text{m}^3$ and for Kent County was 30.66 $\mu\text{g}/\text{m}^3$.²
 - The three-year average of annual mean sampling EPA NAAQS for PM 2.5 - 12 $\mu\text{g}/\text{m}^3$ was never exceeded from 2014 to 2017 (7.86 $\mu\text{g}/\text{m}^3$ in Dorchester, MD and 7.98 in Kent, MD).²
 - These particulate matter levels are lower than those sampled in the City of Baltimore and lower than other areas in the Northeast that don't have poultry houses.
 - There are poultry operations in near proximity to the Dorchester County sampling location and poultry operations and dairy operations near the Kent County sampling location.
 - Delaware Natural Resources and Environmental Control is monitoring air quality in Seaford, Sussex County. The sampling site is just 5 miles from the Maryland State line and is the EPA approved sampling point for Salisbury, MD).
 - Three-year annual average for particulate matter is significantly below EPA's National Air Quality Standard (8.4 $\mu\text{g}/\text{m}^3$ in Seaford, DE vs. 12 $\mu\text{g}/\text{m}^3$ EPA NAAQS (three-year averages))¹
 - Sussex County has the highest density of poultry houses on the Eastern Shore (approximately 150 million birds/year) and in the country
 - Particulate matter levels are lower than Wilmington/Baltimore and lower than other areas in the Northeast that don't have poultry houses. Sussex County Delaware had not exceeded the 24-hour Environmental EPA NAAQS for Particulate Matter 2.5 - 35 $\mu\text{g}/\text{m}^3$ since 2005.
 - Ammonia emissions are already included in the EPA-funded Chesapeake Bay Program (CBP) model

- NH₃ emissions from the Eastern Shore account for only 2% of the nutrients applied to land area in the Chesapeake Bay basin.^{4,5}
 - CBP Version 6 of the Model estimates the nitrogen air emission TMDL will meet the proposed 2025 goal with the current emissions from livestock.
- University of Georgia and other universities have extensively studied poultry house emissions. Information from University of Georgia studies worth noting includes:
- Particulate levels at 100 feet from exhaust fans are statistically indistinguishable from ambient air levels
 - In the worst-case scenario, ammonia levels 500 feet from exhaust fans were less than 1 parts per million (PPM) 90% of the time. At closer distances of 100, 200 and 300 feet ammonia levels were less than 1 PPM approximately 60%, 75% and 85% of the time.
 - Ammonia levels at typical setbacks do not exceed the OSHA/EPA odor detection threshold
2. Public health concerns due to asthma rates have been raised. Existing data from the Maryland and Delaware departments of health demonstrate an inverse relationship between poultry density and asthma.
- Asthma Prevalence data (Ever told they had Asthma from 2015 and 2016) were collected from the Maryland Department of Health and the Delaware Department of Health – references 5, 6, and 7. Poultry population estimates were calculated using the EPA CBP methodology developed by their Agriculture Working group to estimate poultry litter quantities for the Chesapeake Bay Model. This information is included as a graph below. Looking at the data there is a negative correlation (-0.25) of adult asthma rates vs poultry numbers per county with the county with the largest poultry population (Sussex, DE) having a much lower prevalence of asthma than the Maryland State Average (7.5% vs. 14.3%).



Asthma mortality rates tabulated by the Maryland Department of Health show 26 mortalities per 1 million residents in the City of Baltimore due to asthma and 0 per 1 million residents for

Figure 6: Maryland Average Annual Asthma Mortality Rates by Jurisdiction, 2005-2009

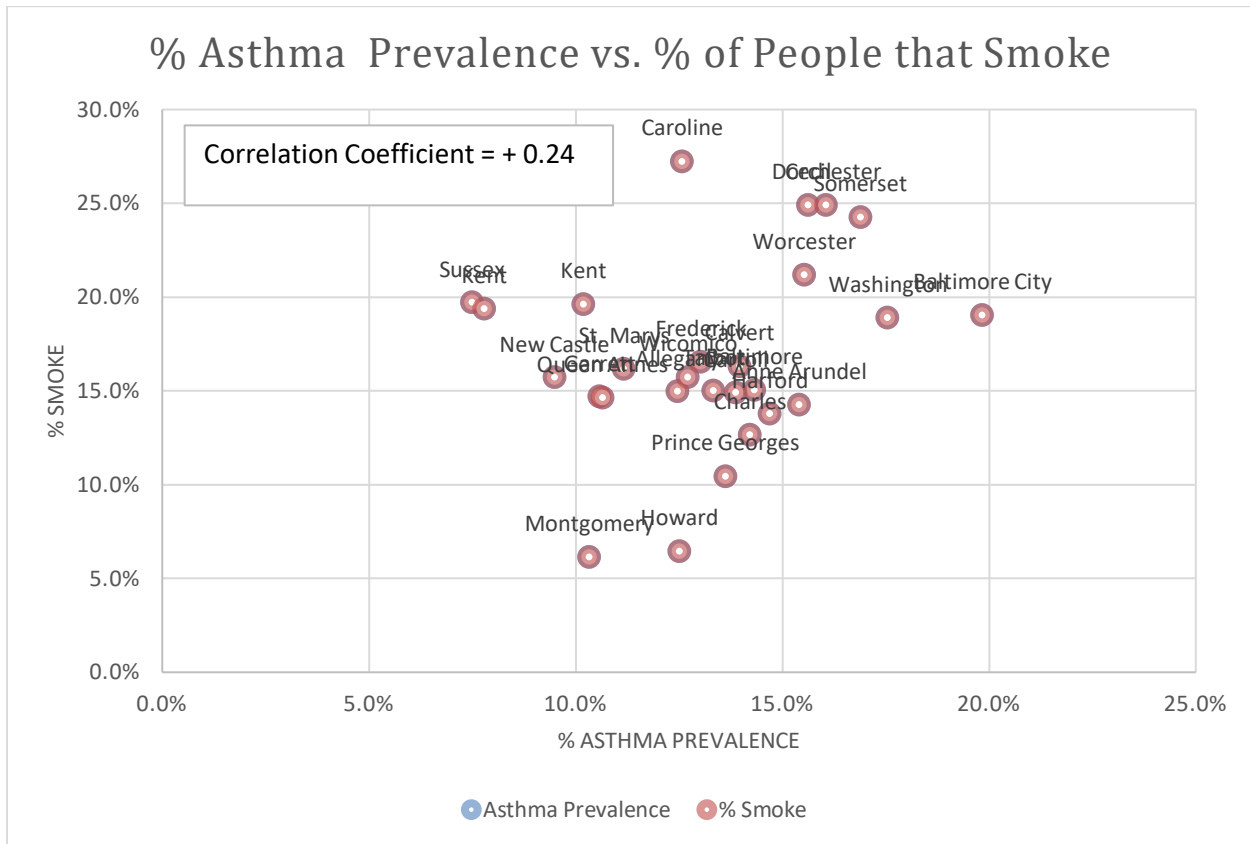


Maryland VSA, 2005-2009.
^a Rates are age-adjusted to the 2000 U.S. standard population.

the Eastern Shore counties.⁸

- The counties that do have significant poultry populations and have higher asthma rates also have some of the highest rates of smoking in the United States.

- The following graph shows asthma prevalence vs. smoking rates and a positive correlation of the data (+0.24)



In addition, we feel it is worth noting that the statistic cited by bill proponents that 1 in 4 middle school students in Wicomico County, MD have asthma was taken from a report produced nine years ago, so may or may not reflect the health status of current middle school students.

- 1) <http://www.dnrec.delaware.gov/Air/Documents/Ann%20Rpt%2015%20final.pdf>
- 2) 2013. Environmental Protection Agency Chesapeake Bay Program Version 6, Atmospheric Deposition Data (downloaded 12-1-17 to 12-13-17)
- 3) 2013. Environmental Protection Agency Chesapeake Bay Program Version 6, Loads and Base Conditions Reports (downloaded 12-1-17 to 12-13-17)
- 4) <https://phpa.health.maryland.gov/OEHFP/EH/tracking/Pages/County-Profiles.aspx>
- 5) <http://www.dhss.delaware.gov/dhss/dph/dpc/files/asthmaburdenupdate16.pdf>
- 6) https://phpa.health.maryland.gov/ccdpc/Reports/Documents/MD-BRFSS/2016_MD_BRFSS_County_Level_Data_Tables.pdf
- 7) <https://phpa.health.maryland.gov/mch/Documents/Data%20Brief%20%20Asthma%20Mortality%20in%20Maryland.pdf>