



Environmental Injustice & Impacts of COVID-19 on the Delmarva Peninsula

The Delmarva Peninsula is overwhelmingly rural, with an economy predominantly driven by agriculture. In the region, there are more than 5,000 Concentrated Animal Feeding Operations (CAFOs) that produce more than 600 million birds and employ more than 20,000 people annually. Most of the region's farms produce corn, soybeans and wheat for poultry feed. For decades, communities in the region have suffered from the adverse public health impacts from these operations -- including toxic drinking water and poor air quality. For some time, experts have warned that the region relies too heavily on one industry. These warnings have come to fruition in light of the pandemic and have far-reaching impacts, outlined below.

Public Health Harms from Depopulation. Approximately 2 million chickens, likely more, have been killed in light of staffing shortages in the region's processing plants due to COVID-19. These dead birds will remain in the poultry houses where they were raised as they decompose.

- Composting birds on a massive scale creates a number of health threats, especially for those who live nearby. In addition to harboring pathogenic microorganisms like E. coli and Salmonella that can contaminate food and water, CAFOs can also contribute to the spread of zoonotic diseases (like the coronavirus fueling the current pandemic). A mass grave of decomposing birds inevitably yields a foul odor that contributes to odor annoyance and stress among nearby residents.
- Even under normal conditions, CAFOs pose various health threats. Noxious gases like ammonia and sulfur dioxide can irritate the eyes, nose, and throat of nearby residents. CAFOs also emit fine particulate matter (PM_{2.5}) that can lodge deep within the respiratory tract and harm the heart and lungs. In the last five years, several studies have connected community proximity to CAFOs to pneumonia, asthma exacerbations, lung disease, stress, and respiratory and gastrointestinal infections.
- Research shows that CAFOs are disproportionately sited near poor families and communities of color who face barriers to accessing health care, stress from the everyday realities of systemic racism, and higher rates of chronic disease.

Worker Safety at Risk. Animal processing facilities, where employees work shoulder to shoulder, across the country have become the nation's leading hotspots for the spread of COVID-19. Farm workers have also been deemed as "essential" and face similar threats.

- Thousands of meatpacking workers have become infected from the virus and hundreds have died, as local health departments have considered shutting these facilities down. Worker attendance at the Delmarva Region's ten slaughterhouse facilities has averaged at about fifty percent. Farmworkers face certain occupational hazards that make them particularly vulnerable to illness due to high rates of respiratory disease.
- Slaughterhouse workers have been routinely denied social distancing protocols, face masks, paid sick leave, and other important measures that prioritize worker safety over profits. Substandard housing and lack of access to running water and stable transportation also make social-distancing a challenge for farmworkers, putting other workers and family members in the community at risk.

- These issues are compounded by the fact that many farmworkers and slaughterhouse workers are immigrants or on guest-worker visas and are not afforded the same protections that other workers may have, even when deemed as “essential.” When individuals are not afforded fundamental rights, they are open to abuse which is only exacerbated in times of crisis.

Heightened Environmental Impacts. The killing off of millions of birds in a geographically concentrated area creates a new waste stream in an ecosystem already overburdened from environmental pollution, especially phosphorus. Land application has been recommended as a means to dispose of the dead chicken compost, but this type of compost is generally higher in phosphorus than chicken manure and would pose serious run-off concerns.

- The poultry houses where chickens have been killed off have essentially turned into make-shift compost facilities but may not be adequately structured to successfully compost and contain the decaying birds. The process for composting dead broiler chickens also breeds pathogenic microorganisms, nuisance insects, fly, larvae, bacteria and other viruses borne from composting dead chickens.
- The CAFOs on the Delmarva Peninsula are already creating more phosphorus pollution than the region can adequately handle, and agriculture is the single largest source of nutrient pollution to the Bay watershed as a whole. In 2018, the Delmarva poultry industry generated approximately 1,100,000,000 pounds of phosphorus-laden manure.

Recommendations. To build a more resilient economy, healthier communities, and a cleaner environment -- we recommend supporting policies that:

- Invest in the diversification of agriculture across the region. This move will yield greater economic benefits, provide greater employment opportunities, increase local spending, produce greater tax income for local governments, and make these communities more adaptable in the face of future crises.
- Support the creation and licensing of smaller slaughterhouses, and related storage infrastructure, where social distancing is possible and where direct marketing to consumers is more feasible. This will reduce the risk of future mass killing events and provide smaller farms with needed processing infrastructure.
- Provide support, both technical and financial, for farmers who want to transition from conventional feed grain to organic feed grain. This would increase the supply security, shorten the supply chain, and reduce reliance on imports of organic grain.
- Fund measures that increase rural broadband and help get local food into the hands of local communities. Smaller farms that sell direct-to-consumer have been thriving during the pandemic, but rural farms have demonstrated the need for resources to help them scale up such as access to adequate rural broadband.
- Provide greater support for farm and slaughterhouse workers such as hazard pay and increased labor protections. These workers are essential workers and are designated as such. The right of essential workers to live in the region where they work should be protected regardless of their documentation status.

Sources.

1. [Strengthening a Region: Using Input-Output Analysis to Quantify the Impact of Crop Diversity on Maryland's Eastern Shore](#)
2. Fair Farms Agro-Economic Report: Diversifying the Agricultural Basket
3. [Baltimore Sun](#): Nearly 2 million chickens at Eastern Shore farms set to be destroyed because of coronavirus-related plant shortages
4. [New York Times](#): Nearly 2 Million Chickens Killed as Poultry Workers Are Sidelined
5. [The Atlantic](#): America's Slaughterhouses Aren't Just Killing Animals
6. [Center for American Progress](#): Protecting Farmworkers From Coronavirus and Securing the Food Supply
7. [Delmarva Land and Litter Collaborative](#). Exploring Chicken Farming on Delmarva.
8. [New York Times](#): Poultry Worker's Death Highlights Spread of Coronavirus in Meat Plants

9. [Delmarva Now](#): Md. not ready to deal with impact of new pollution rule on Shore growers: Study
10. [UGA Extension](#): Poultry Mortality Composting Guide
11. [Chesapeake Bay Program](#): 2017 Watershed Implementation Plans (WIPs).