



Policy Pathways |  
07/06/2024

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# **THE RIGHT TO BREATH**

## **POLICY ANALYSIS OF COAL DUST IMPACTS AND SOLUTIONS IN HAMPTON ROADS, VA**

**Policy Pathways: iCapstone Research Project**

**NAME OF PROJECT:**

iCapstone Policy Pathways  
Project

**PRESENTED BY:**

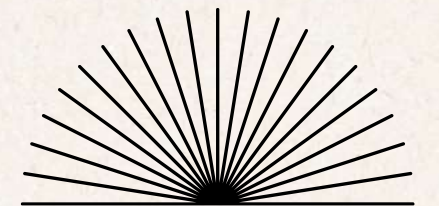
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**PRESENTED TO:**

2024 Summer Academy Policy  
Pathways Cohort, CEO, and  
Staff

**REPRESENTATIVE(S):**

Mr. Lathaniel Kirts - Coal Dust  
Kills





# Problem Statement

02/10

WHY SHOULD YOU CARE?  
WHAT IS THE PROBLEM?

Coal dust pollution from nearby export terminals has plagued communities in Hampton Roads and Newport News in Southeast Virginia since the 1980s. This airborne dust poses health risks, challenges environmental regulations, and disproportionately impacts residents living near the terminals. The current transportation and storage methods for coal, using open rail cars and stockpiles, are the root cause of this issue.





**Area:** Hampton, Virginia

**Affected Group:** Residents of Southeast and Central Virginia

**Timeline:** 1980s\* - Now

## 01 Health Concerns

- Respiratory problems: Chronic obstructive pulmonary disease (**COPD**) and **black lung disease**.
- Studies link coal dust exposure to **heart disease, certain cancers,** and **developmental problems in children.**

## 02 Economic Concerns

- **Decreased property values,** reduced enjoyment of public areas, and business impacts.

## 03 Environmental Concerns

- **Air pollution, water pollution,** and soil contamination.

# Policy Context





# Health: Testimonial

05/10



Area: Newport News, VA

Speaker: Uneita Scott

Year: 2024

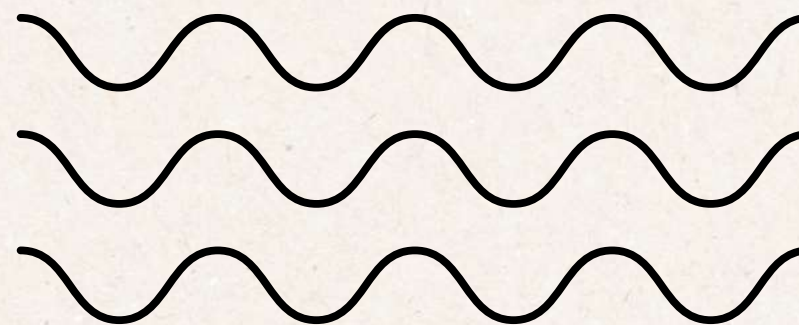
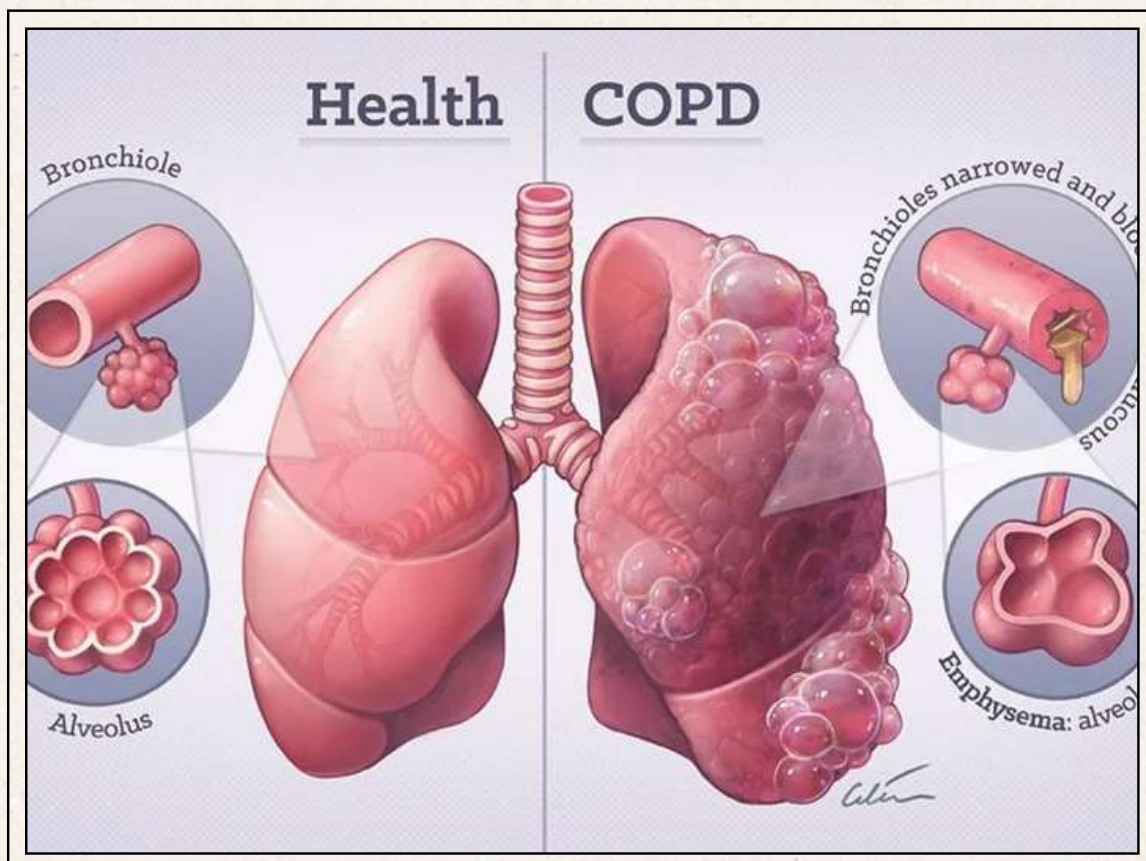
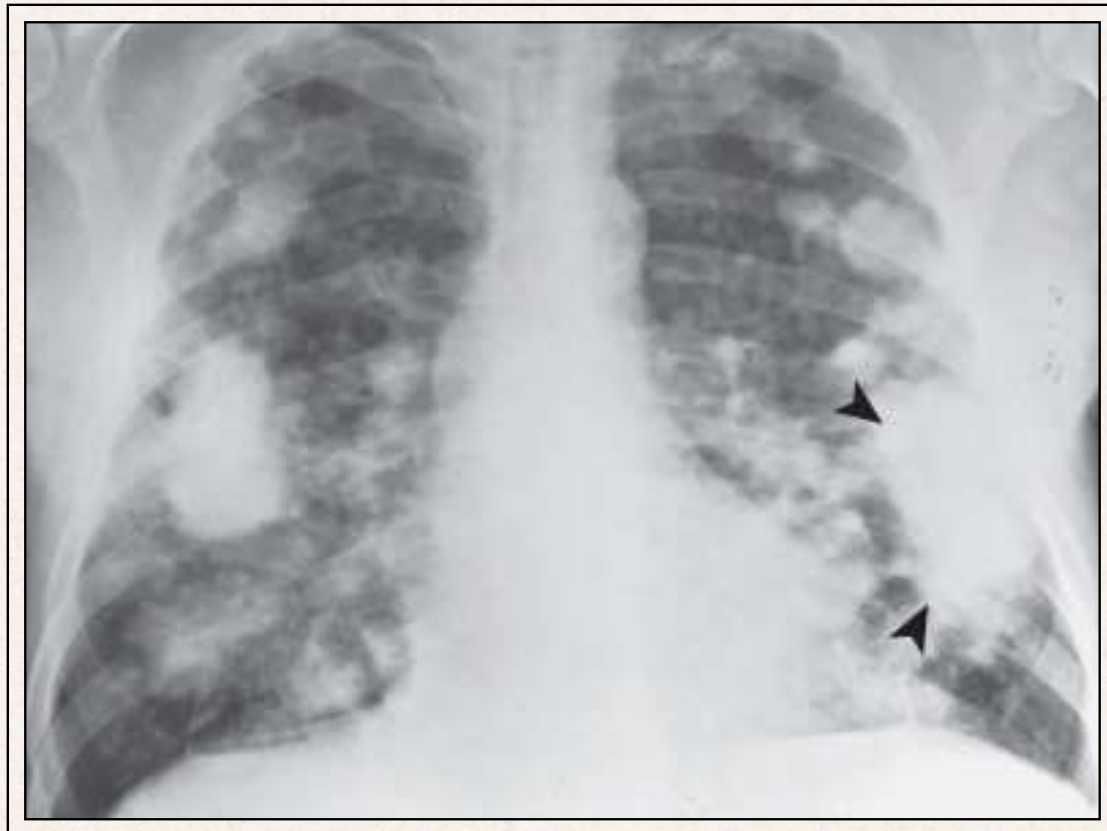
Resource: <https://www.wtkr.com/news/in-the-community/newport-news/newport-news-residents-say-coal-dust-is-the-source-of-some-health-problems>

Testimonial:

"My older sister and I would play and we would see coal on the windowsills. It was nothing for us to see coal on the ground"

" [My sister's] diagnosis was a coal miner's lung so they had to amputate it for her to have a healthy life."

"At 14 years old, doctors verbatim said she had the lung of a 30-year-old that worked in the coal mines,"





# Policy Formation

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**Conflicting interests, practical difficulties, and resource constraints have frequently complicated policy creation, calling for a multi-pronged strategy to identify workable answers.**

- **Occupational Safety and Health Act (OSHA) Regulations:** Protects workers from coal dust exposure through safety standards and monitoring.
- **Energy Policy Act of 2005:** Promotes clean coal technologies, research into carbon capture to reduce coal dust emissions.
- **State Legislation and Community Advocacy:** States enact laws; advocacy for stricter regulations and legal action.
- **EPA: 2020:** Stricter Coal Dust Transportation Regulations
- **NASA PurpleAir Machines:** monitor air quality, including PM 2.5 particles.
- **Sierra Club:** [Pushing EPA to regulate uncovered train cars](#) that carry coal

## Challenges:

Monitoring gaps in affected communities (17 monitoring devices in VA)  
PurpleAir machines only record PM 2.5 particles, which are too small to capture coal dust particles.

Distance limitations (e.g., 60 miles) between monitors and communities

\*EPA 2020 Update does not affect older facilities such as Kinder Morgan Terminal



# Policy Analysis

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Disadvantages of existing legislative and regulatory structures:

- Inadequate enforcement measures
- Inconsistent administration
- Lack of reporting and monitoring systems
  - Difficulty in determining extent of issue

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“**Advanced black lung is rampant** across the coal-producing regions in West Virginia Southwestern Virginia.” Source: Public Broadcasting

“Asthma rates of [...] Newport News as a whole were double that the state of Virginia”  
Source: Peninsula Health District

## Hampton Roads Race & Ethnicity, 2019

White **59%**

Black/ African American **31%**

Asian **4%**

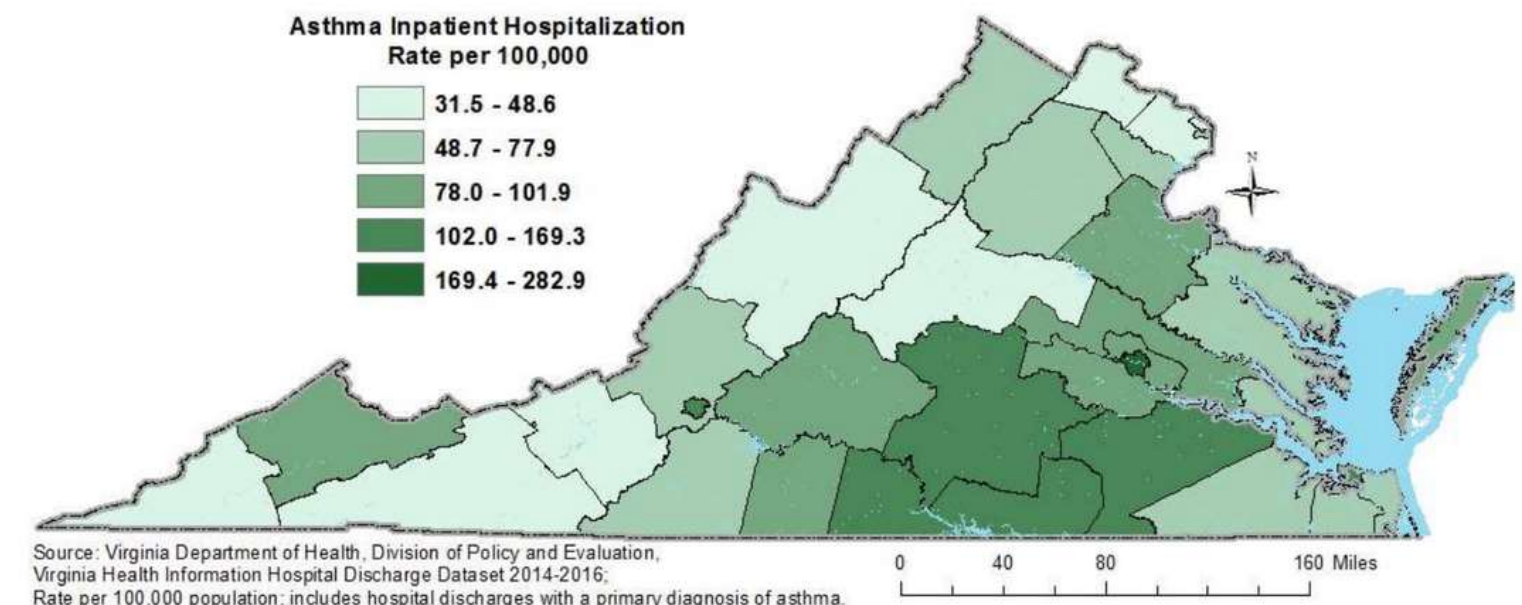
Two or More Races **4%**

Other **3%**

Source: American Community Survey, HRPDC

## Health Districts and Prevalence Rate of Asthma in Virginia:

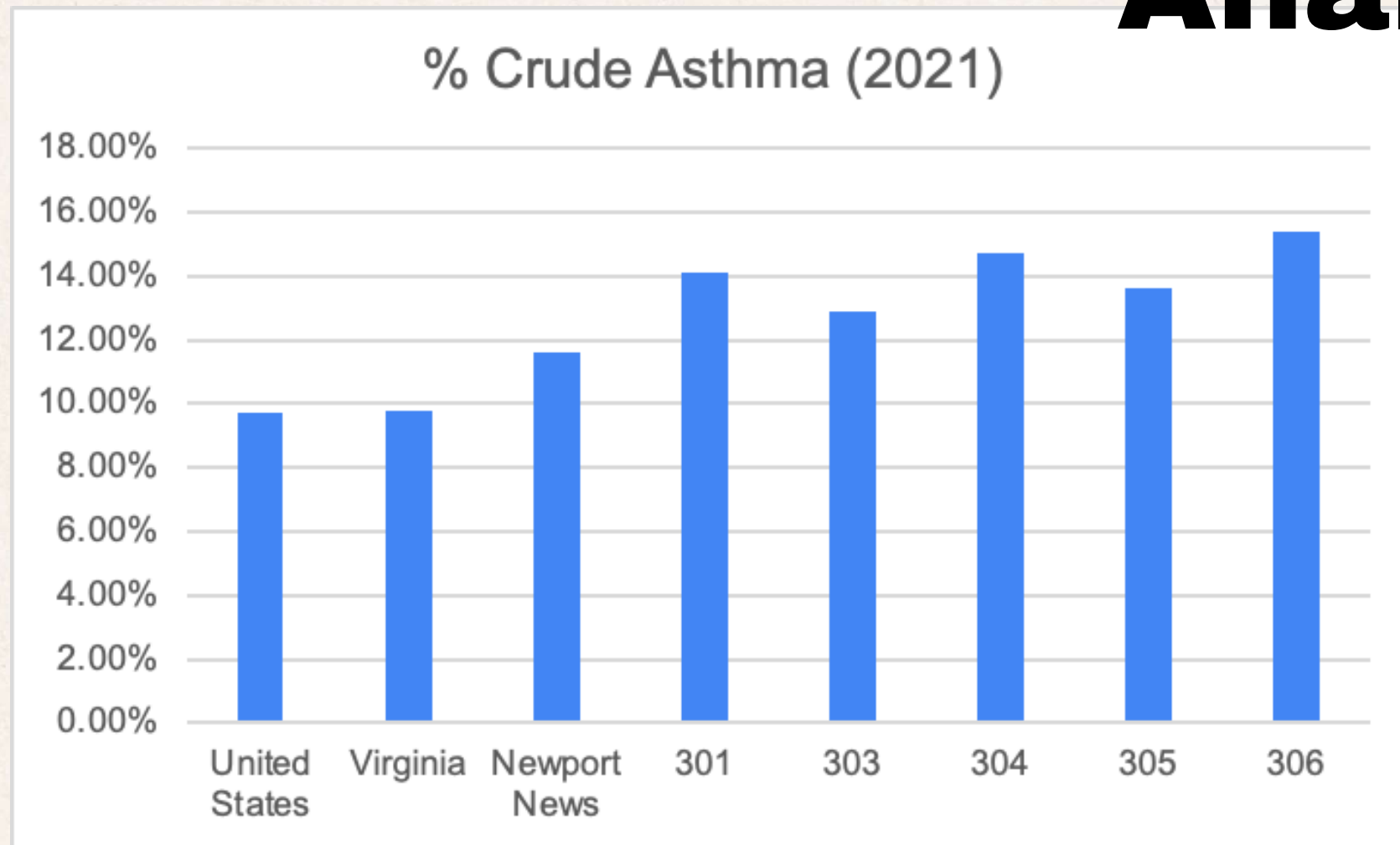
Figure 11: Age-Adjusted Asthma Inpatient Hospitalization Rates by Local Health Districts: Virginia, 2014 - 2016



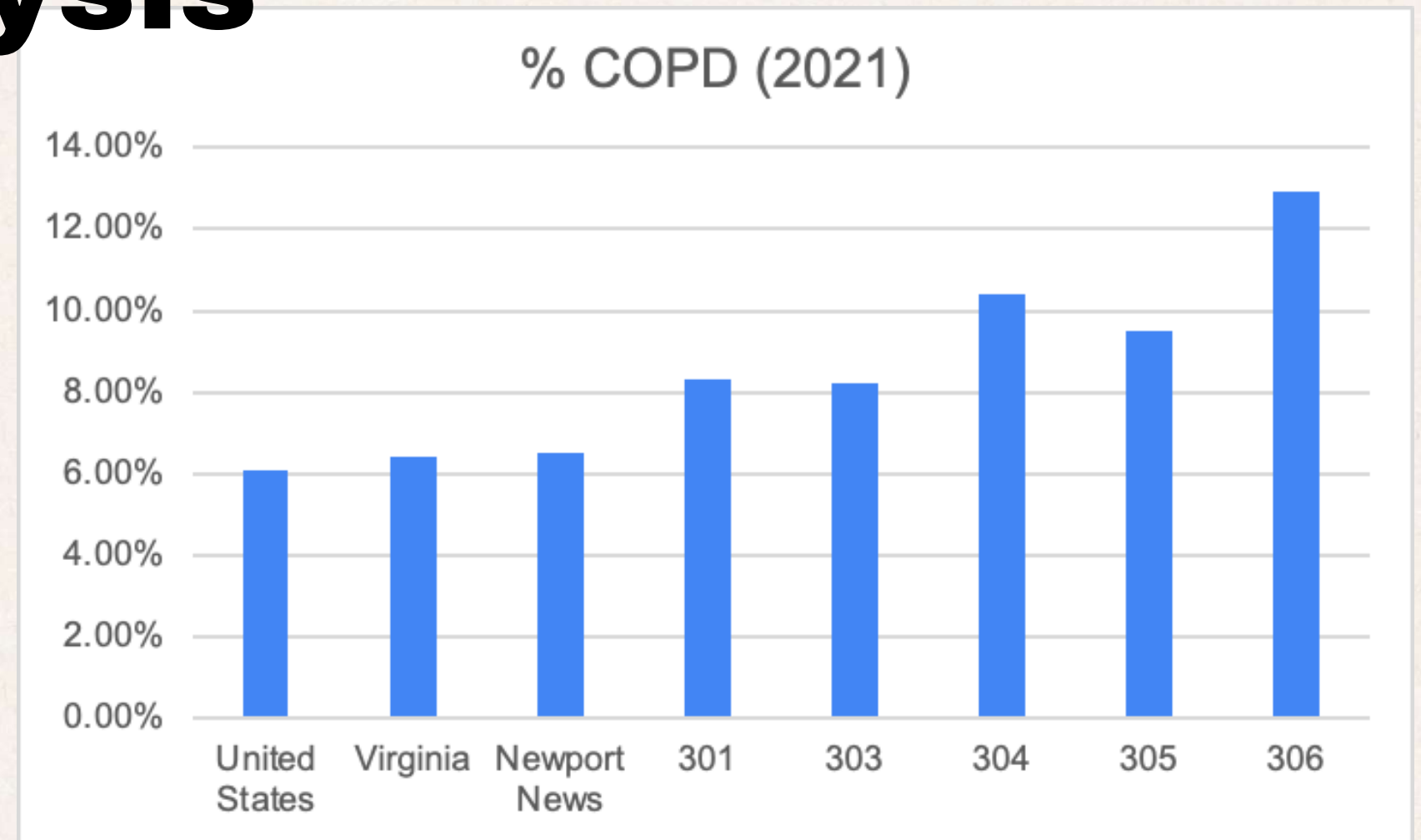
Source: Virginia Department of Health



# Policy Analysis



CDC data from 2021



CDC data from 2021



# Policy Implications



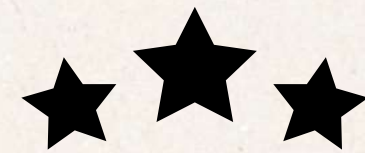
## Community

- improve quality of life
- may increase property value



## Coal Company

- change regulations
- invest in improved pollution containment



## Federal Government

- create national standards for pollution containment



# Recommendations

How to make Hampton Virginia a safer and cleaner place:





# Resources

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**Thanks to Mr. Lathaniel Kirtz,  
and Dr. Pulane Lucas**

<https://coaldustkills.wpcomstaging.com>

<https://geohub.nnva.gov/datasets/8b412794a5be4ca1a0b486bff71772d6/explore?location=37.084690%2C-76.384796%2C9.62>

<https://www.cdc.gov/asthma/asthmadata.htm#:~:text=The%20current%20asthma%20prevalence%20among%20adults%20in%20creased%20from%206.9,2001%20to%208.0%25%20in%202021.>

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