VDH INTERNSHIP ACADEMY 2023





Prince William Health District Intern: **Kira Funge University of Pittsburgh '22** B.S. Neuroscience Global Health Certificate Chemistry Minor

Mentor: Patrick Berard Jr., EHS Supervisor: Patrick Jones, EH Manager

PROJECTS COMPLETED

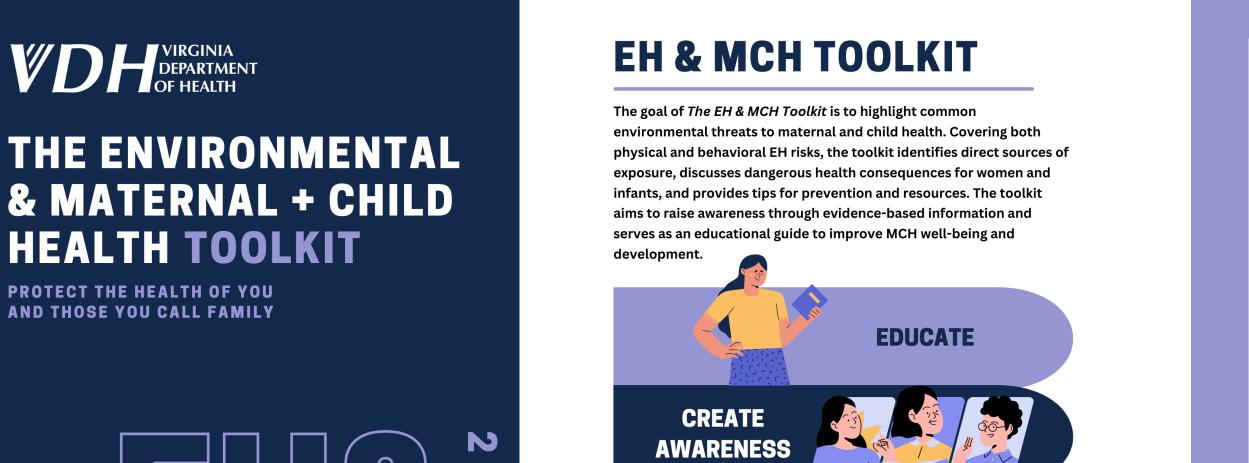
Developed a PFAS brochure for use in PWHD:

What are PFAS?	Resources	Prince William	Exposure to PFAS	Potential Health Effects	What is Virginia	
	Taking charge of your health means staying informed!	A brief overview	• The most common route of exposure to PFAS is consumption of	 The full range of health effects caused by PFAS is still being studied 	Doing about PFAS?The Virginia Office of Drinking Water	PF
that have been used in many industrial and consumer products since the 1940s	PFAS in general:		contaminated food and water:Drinking contaminated water	 Current research indicates that exposure to high levels of PFAS may be 	(ODW) is currently in Phase 2 of the sampling program to measure PFAS in Virginia's water supply	
Since PFAS are widely used, they can be found in the water, soil, air, and	 Detailed information about PFAS in Virginia can be found <u>here</u> Use ODW's <u>PFAS Tracking tool</u> find out 	PFAS	 Eating fish from contaminated water Eating food grown near areas with 	linked to:	ODW is working with utility providers	en
many consumer goods	what the PFAS levels look like in your area		 high levels of PFAS Eating foods prepared in 	 Increased cholesterol levels Changes in liver enzymes Decreased vaccine response in 	to monitor PFAS within public drinking water supply	PF
PFOA (perfluorooctanoic acid) and PFOS (perfluorooctane sulfonic acid) are the two most common types of	 See VDH's toxicology site about PFAS PFAS in private wells: 	Per-and polyfluoroalkyl substances	packaging made with PFASLiving near factories or working in	childrenGreater risk of high blood pressureor pro oclampsia among prognant		
PFAS in the United States	 Find out more about PFAS in Virginia 	Onsite Sewage & Water Services 5 County Complex Court	jobs that make PFAS may increase amounts in the blood	or pre-eclampsia among pregnant women • Small decreases in birth weight in	Private Wells	ри
PFAS are often found in:carpet	 well water on <u>VDH's website</u> A list of EPA-approved laboratories may be accessed <u>here</u> 	Suite 240, Woodbridge, VA 22192	 Levels of PFAS in bottled water are not monitored by the FDA, so drinking 	infants Kidney and testicular cancer 	 If you are one of the 1.6 million Virginians that rely on a private well, it is your responsibility to test your water 	ри
 fabric firefighting foams 	Federal Agencies & PFAS:		from them is not necessarily a safe alternative	 Health outcomes are dependent on many factors that are still being 	 VDH does not test for PFAS in private 	•
 non-stick coating on cookware and food packaging 	 Learn more about PFAS on the <u>EPA's</u> website 		 Get the most updated information in the resources tab 	studied	wells, nor do they require anyone to test for it	Dv
PFAS take a long time to break down in the environment					 If you live in an area that is known to have high levels of PFAS, it may be wise to consider having your water 	P∖
Understanding of PFAS continues to change as new data emerges	VIRGINIA DEPARTMENT OF HEAITH			Always talk to your doctor about your health concerns.	 Please note, private well testing for PFAS can be difficult and costly 	re

PFAS (also called 'forever chemicals') are a big topic in environmental health right now. Given the unknowns of PFAS, I wanted to create a brochure to educate the public about basic information about PFAS and point the public to resources to learn more. Thank you to Dr. Dwight Flammia, Toxicologist and Emely Melendez, PWHD Population Health Community Coordinator for reviewing the brochure.

Created an Environmental Health and Maternal & Child Health Toolkit:

In collaboration with VDH Academy Intern, Allison Hoang, we created an 85 page toolkit. Our goal with this project was to promote health education regarding environmental hazards, climate change in relation to maternal and child health.



<section-header>THE INTERSECTION BETWEEN EH & MCHImage: Image: Image:

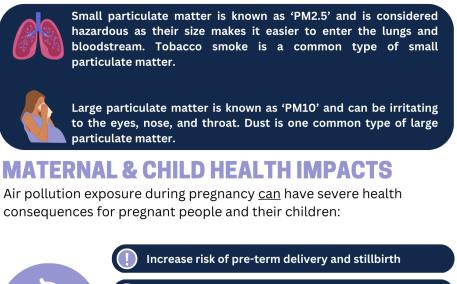
harm any part of the population, certain groups are more likely to experience higher rates of disease and injury. This is the case with pregnant mothers and children, due to their vulnerable status.

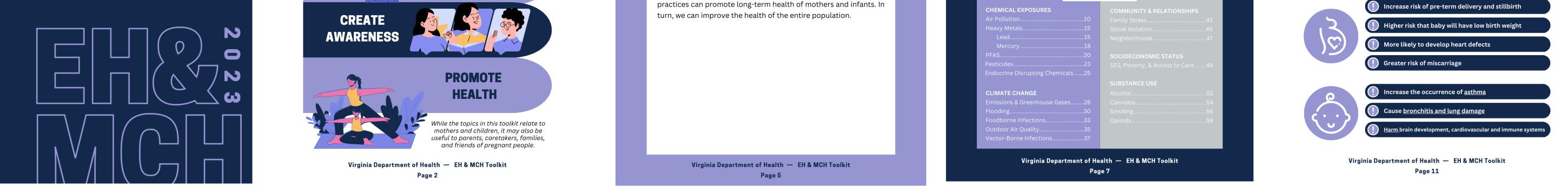
Climate change continues to threaten the world around us, making it vital to address these environmental hazards within the community as early as possible. Knowing the risk behaviors, promoting prevention, and emphasizing good public health practices can promote long-term health of mothers and infants. In turn, we can improve the health of the entire population.

PHYSICAL ENVIRONMENT	&	SOCIA Environi		
	THE DIFFEREN	CE		
The environment that physically		The social setting made up of a		
surrounds a person and includes		person's behaviors, beliefs, customs,		
tangible elements and structures.		and practices.		
Physical, chemical, biological,		Relationship dynamics, personal		
or radiological agents.		lifestyle habits, or social status.		

PARTICULATE MATTER

Particulate matter (PM) are tiny pieces of solids or liquids within the air, such as dust, dirt, soot, or smoke that can be harmful to human health. Particulate matter varies in size, and can be small or large.





DAILY ACTIVITIES

INSPECTIONS

 Assisted with inspections for private wells, marinas, swimming pools, restaurants, and hotels throughout the county

INVESTIGATIONS

• Collaborated with other county departments, including building, zoning, and code enforcement to follow up on complaints for septic tanks and health & safety menace



Allison H. & I helped the EH Associate in PWHD pack rabies specimens.



LESSONS LEARNED

- Creating health education materials that can be understood by the public can be challenging, especially when dealing with scientific topics
- Environmental health plays a huge preventative role in many diseases. Ensuring EH departments are well-staffed is important to promoting the safety and health of the public
- Bureaucracy is a regular process that local health departments have to navigate

FUTURE GOALS

• The VDH Internship Academy experience solidified my

- complaints
- Foodborne illnesses investigations

RABIES PROGRAM

- Quarantine checks and site visits
- Reviewed bite reports
- Packed specimens for lab testing

SKILLS LEARNED

- Beginner and intermediate/advanced excel training through VDH
- Beginner and intermediate SQL through DataCamp via VDH
- Creating health education materials
- Health promotion
- Cross-department collaboration

- desire to pursue a career in the field of public health
- I am actively searching for employment opportunities in public health/environmental health within the Northern Virginia and Washington D.C. area
- I plan to apply to MPH programs to start in Fall 2024

SPECIAL THANKS

I would like to extend my thanks to Jeff Stover and Sam Walmsley for creating an amazing internship experience. I also would like to thank both Patrick Jones and Patrick Berard Jr. for mentoring me during these 10 weeks. And finally, thank you to the entire team at PWHD! I have learned so much and hope to be back at VDH soon.