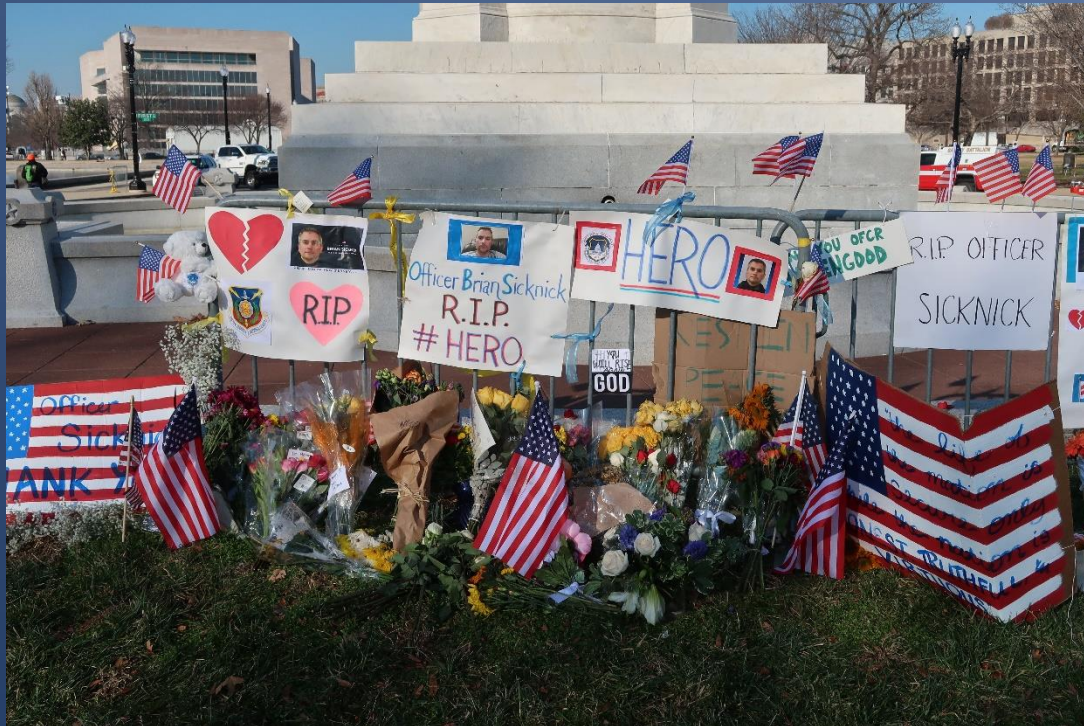


Tears to Motivate Us

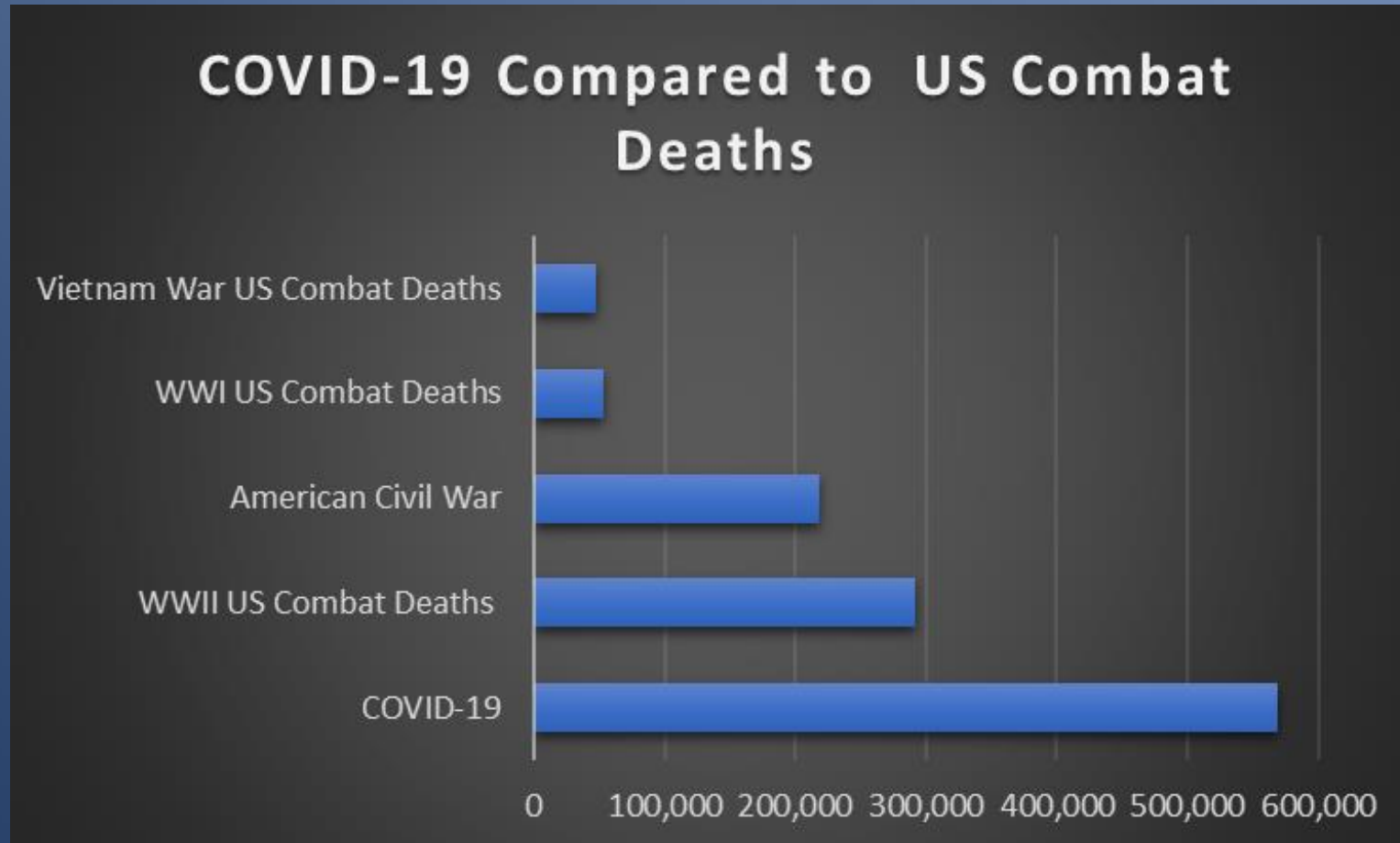


David T. Dyjack, Dr.PH, CIH
May 26, 2021
Twitter: @dtdyjack

Washington DC January 12, 2021



U.S. COVID Mortality – April 27, 2021



Pain & Despair

KCRA 3
96 Shares
f
t

KCRA NEWS 3 WEEKDAYS 4-7AM
Advertisement

Man killed in strip mall stabbing was Sac County restaurant inspector, officials say

Motive for attack unclear

KCRA 3
Updated: 11:58 AM PST Jan 20, 2021

Infinite Scroll Enabled

Hope Miller

SACRAMENTO COUNTY, Calif. — The victim in a deadly stabbing outside a Sacramento County strip mall has been identified as a restaurant inspector for the county, officials say.

Dennis Catanyag was killed last Thursday outside a Little Caesars and the Mosaic Mediterranean Cuisine restaurant on Fulton Avenue, between

Major exodus among public health officials during pandemic

It is the largest exodus of health officials in American history, experts say.

By **Sasha Pezenik** and **Laura Romero**

February 5, 2021, 4:00 AM • 10 min read



COVID-19 vaccines and new variants

Dr. Drew Weissman from the University of Penn... [Read More](#)
Mary Altaffer/Pool via Reuters

Two Days



November 10, 2019



November 11, 2019





Environmental Health applies to you if you:

- Breathe air
- Drink water
- Eat food
- Recreate
- Travel
- Go to School
- Exist
- Environmental Health impacts you everyday!



Detect a Pattern?

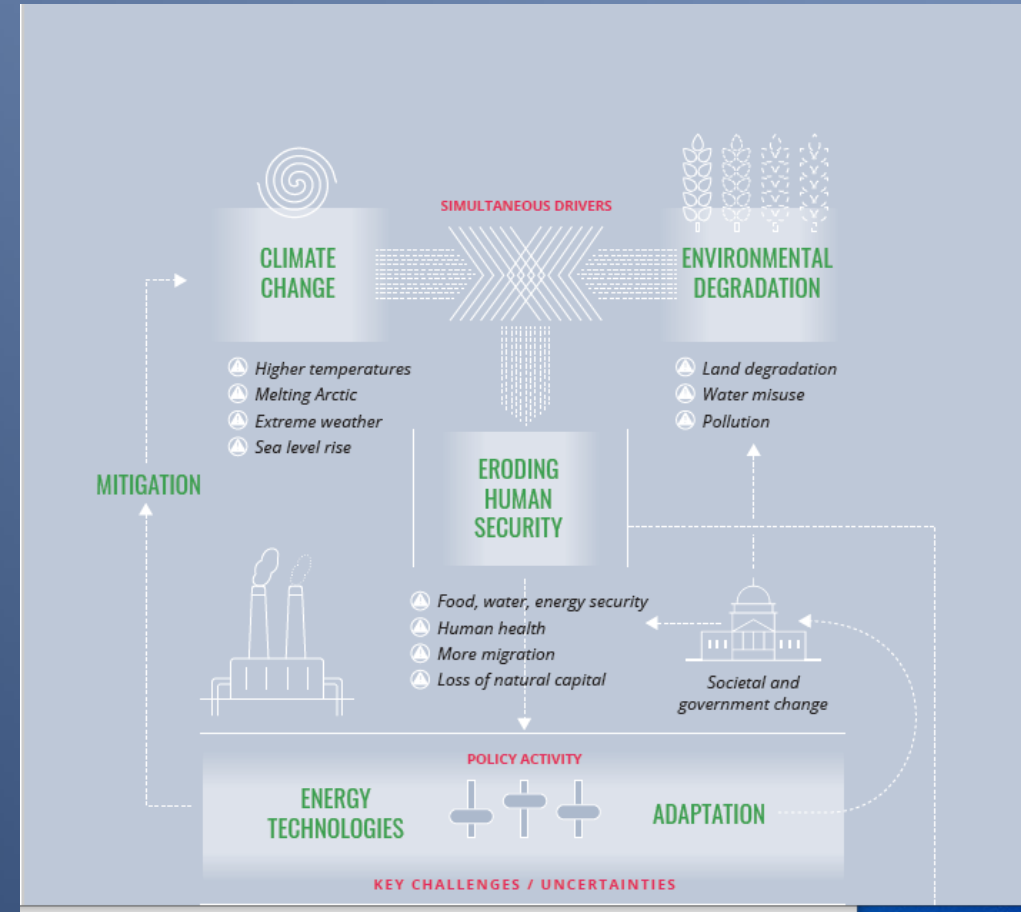
10 global challenges the world will face in the next 25 years - according to engineers

 by **Create Digital** — March 5, 2020
2 min read



1. Securing Cyberspace
2. Economical Clean Energy
3. Sustaining Land & Oceans
4. Sustainable & Resilient Infrastructure
5. Sustainable Cities
6. Access to Clean Water and Sanitation
7. Clean Air
8. Food Security
9. Prepping for & Containing Pandemics
10. Developing and Delivering Better Medicines

The Future



ERA #3

THE ENVIRONMENT TURNS ON US



The Future is Now

Western U.S. may be entering its most severe drought in modern history

BY JEFF BERARDELLI
APRIL 12, 2021 / 6:46 AM / CBS NEWS

CBS NEWS CBS NEWS CBS NEWS

PRECIPITATION % LAST 6 MONTHS



CLIMATE WATCH

SCIENTISTS WARN OF HISTORIC SUMMER DROUGHT

CBSN

Extreme drought across the Western U.S. has become as reliable as a summer afternoon thunderstorm in Florida. And news headlines about drought in the



'Record-breaking' temperatures to engulf Southwest, with 'critical' fire weather conditions possible

BY MATTHEW CAPPUCCI
APRIL 2 AT 12:26 PM

It might be only April, but summer weather is already baking the desert Southwest and bringing triple-digit heat. Phoenix could hit 100 degrees this weekend as a record-breaking air mass brings dangerous heat and fire weather concerns to the region. The heat is in sharp contrast to the [mild winter weather](#).

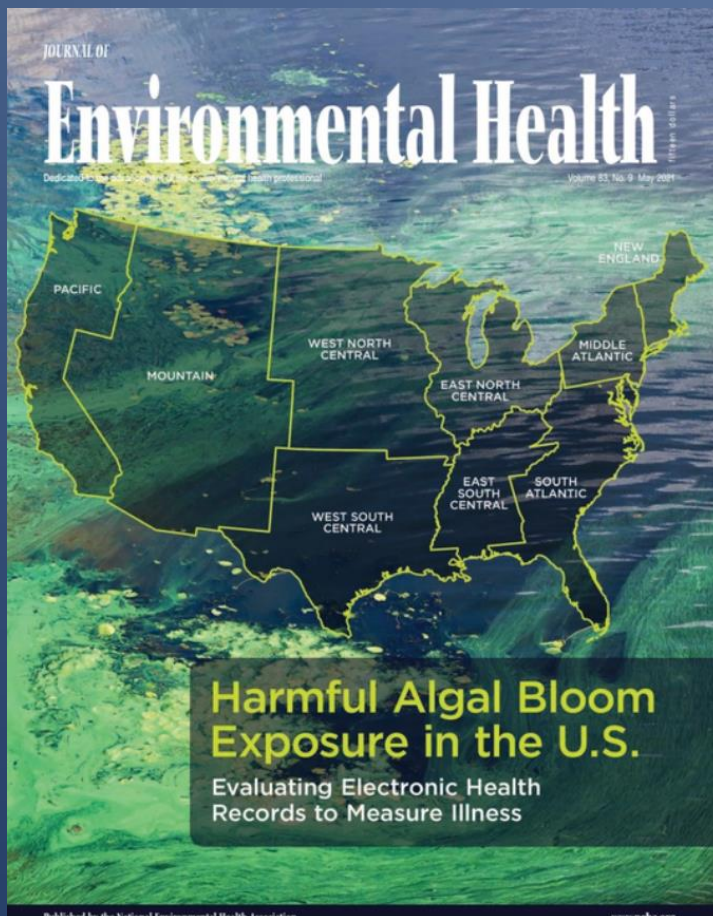
WATER INSECURITY



- LEGIONELLA
- \$1 TRILLION
INFRASTRUCTURE
- BIOFILM



Algal Blooms



Harmful algae blooms in freshwater bodies

This fact sheet is also available to download in these languages: Spanish, Portuguese, Simplified/Traditional Chinese, Haitian Creole, Khmer, Russian and Vietnamese.

TABLE OF CONTENTS

- ✓ Are algal blooms harmful?
- ✓ [How do I know if there is a harmful algal bloom in the water?](#)
- ✓ [What causes cyanobacteria to grow?](#)
- ✓ [How are humans and animals exposed to cyanobacteria?](#)
- ✓ [What should I do if I suspect a harmful algal bloom?](#)
- ✓ [What are the possible health effects associated with cyanobacteria?](#)
- ✓ [What should I do if I am exposed to cyanobacteria?](#)
- ✓ [What assistance can DPH provide?](#)
- ✓ [What can be done to eliminate an algal bloom?](#)
- ✓ [What can be done to prevent harmful algal blooms?](#)

[show more](#)



The way we think about food

Fight climate change by preventing food waste

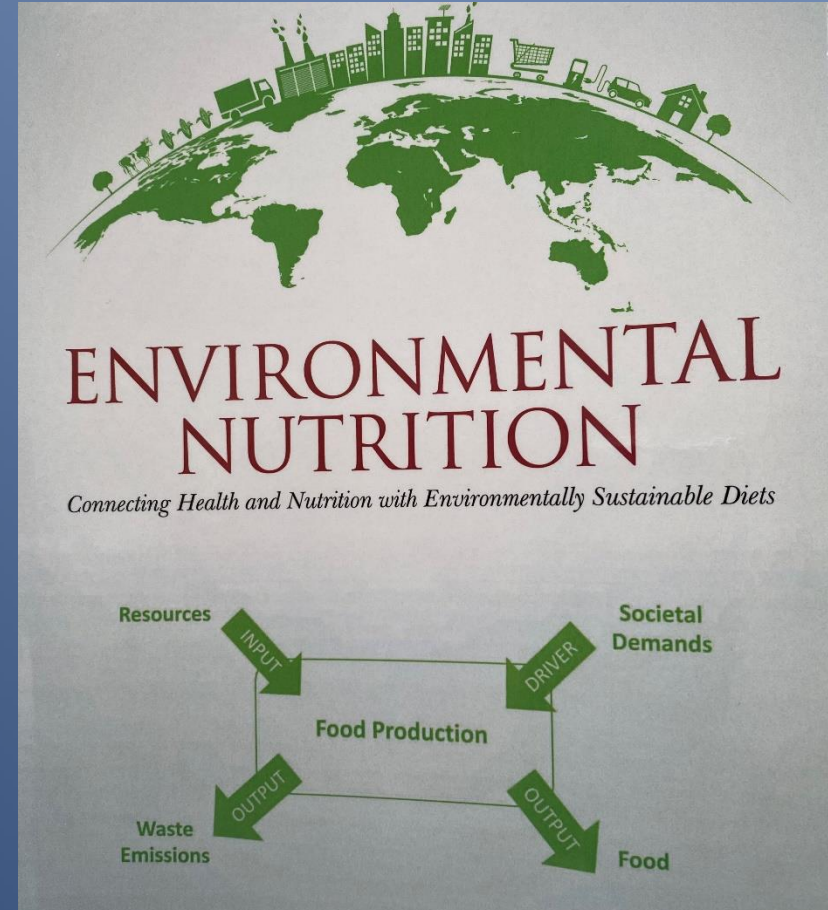
A few simple steps could help reduce the environmental impacts of wasted food



Share 3.2K

Today, an estimated one-third of all the food produced in the world goes to waste. That's equal to about 1.3 billion tons of fruits, vegetables, meat, dairy, seafood, and grains that either never leave the farm, get lost or spoiled during distribution, or are thrown away in hotels, grocery stores, restaurants, schools, or home kitchens. It could be enough calories to feed every undernourished person on the planet.

But wasted food isn't just a social or humanitarian concern—it's an environmental one. When we waste food, we also waste all the energy and water it takes to grow, harvest, transport, and package it. And if food goes to the landfill and rots, it produces methane—a greenhouse gas even more potent than carbon dioxide. About 11% of all the greenhouse gas emissions that come from the food system could be reduced if we stop wasting food. In the US alone, the production of lost or wasted food generates the equivalent of 37 million cars' worth of greenhouse gas emissions.



Biosolids

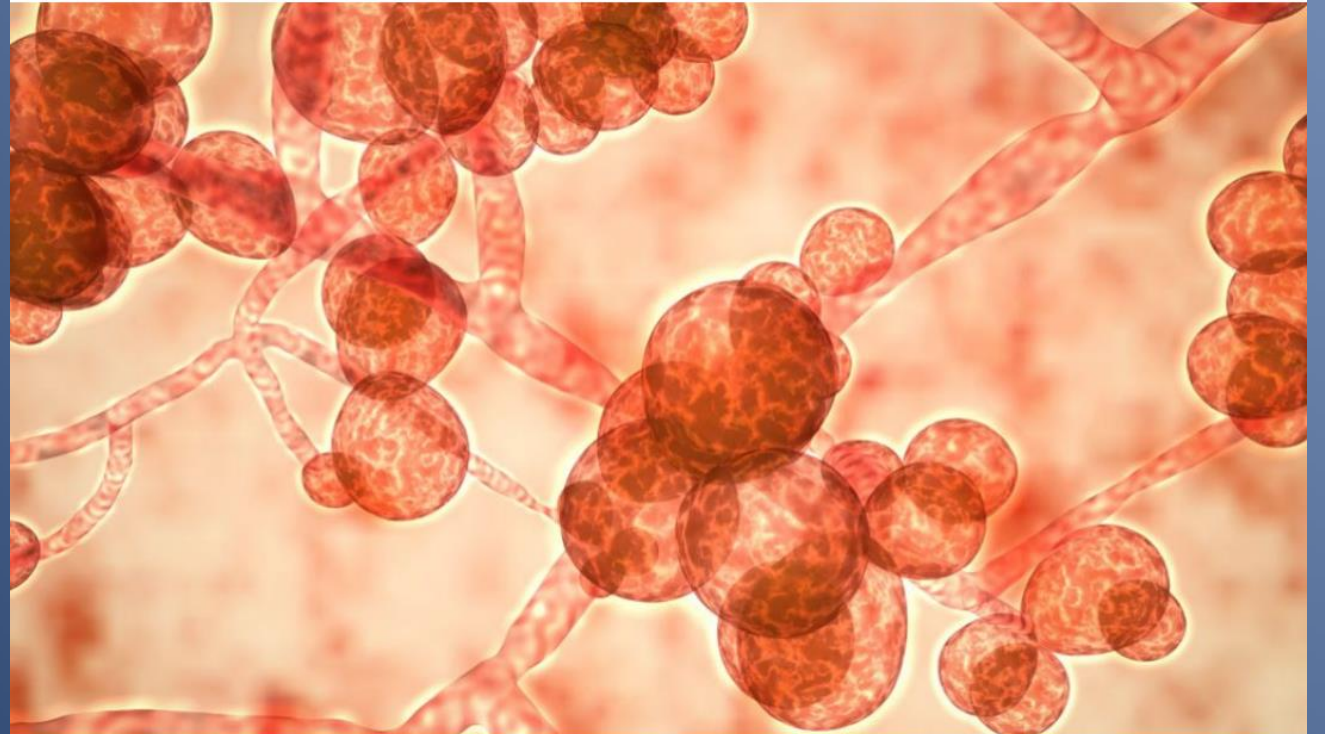


Fungi, Bacteria & HAIs

- Climate Mediated Adaptations
- Antibiotic Resistance Organisms
- Antibiotics in CAFOs
- LTCs

Climate change may be aiding a deadly fungus in infecting humans

The number of cases of fungal infections has increased around the world



A fungus called *Candida auris* (illustrated) can cause deadly infections in people.

Vectors

 **BOSTON PUBLIC HEALTH COMMISSION**

[HOME](#) > [WHAT WE DO BY TOPIC](#) > [INFECTIOUS DISEASES](#) > [INFECTIOUS DISEASES A-Z](#) > [LYME DISEASE](#)

LYME DISEASE

What is Lyme disease?

Lyme disease is an illness caused by bacteria that are spread to people and animals by tiny infected deer ticks. It is the most frequently reported tick-borne illness in the United States.

Where is Lyme disease found?

In Massachusetts, deer ticks are found everywhere, but especially in coastal areas, the islands and the Connecticut River Valley. In the Boston area, ticks can be found in grassy, brushy or wooded areas. The time the disease is most likely to spread is between spring and early autumn, when ticks are most active.

How is Lyme disease spread?

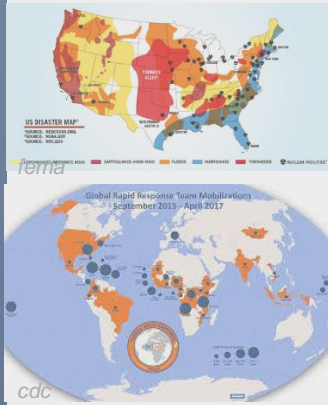
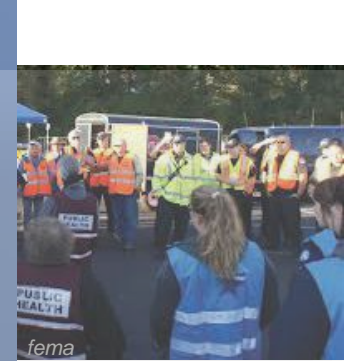
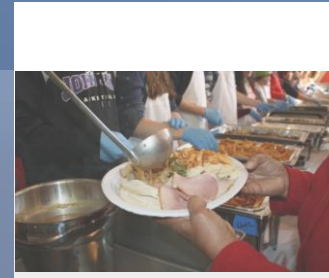
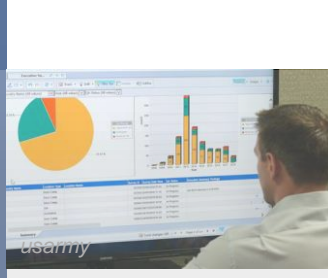
Deer ticks cling to plants near the ground in brushy, wooded, or grassy places. These ticks are quite small and climb onto animals and people who brush against the plants. Very young ticks, called larvae, which are no bigger than the period at the end of a sentence, pick up the bacteria that cause Lyme disease by biting infected animals. Slightly older ticks, called nymphs, which are the size of a poppy seed, are the stage most likely to bite humans. Adult deer ticks can also transmit the disease, but they are not as great a risk as nymphs are because the adults are less likely to bite humans because they are easier to see and remove. Deer ticks are small as seen in their size in comparison to a dime:

Blacklegged Tick (*Ixodes scapularis*)



adult female adult male nymph larva

CLIMATE DRIVEN EP&R NEW NORMAL



Usual &
Customary

Secondary
Responders

Recovery

Data
Collection

Temporary
Food
Establishments

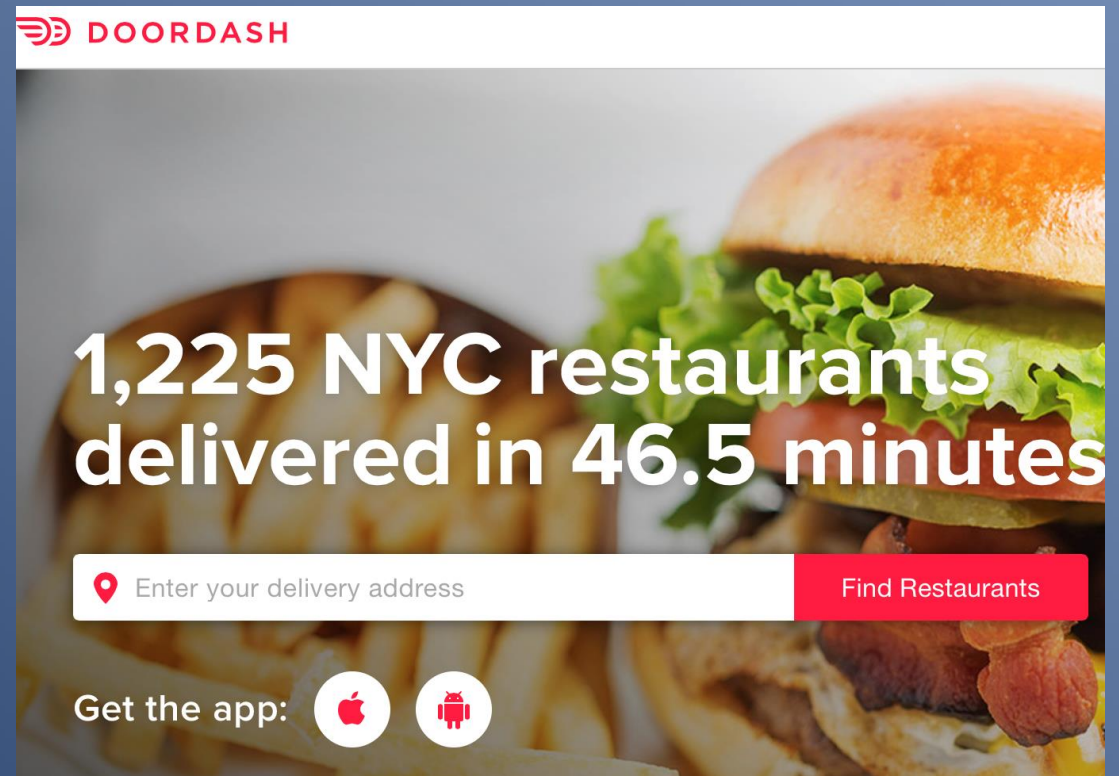
Temporary
Shelter

Strike Teams

The manner in which we engage food

Meal Kits- Ghost restaurants

- UberEats
- Instacart
- DoorDash
- Blue Apron
- Hello Fresh
- Grubhub
- Home Chef
- Seamless
- Home Restaurants & Groceraunts



Environmental Racism



‘This is environmental racism’

How a protest in a North Carolina farming town sparked a national movement

CRIMINAL CHARGES

Executive gets 28 years in prison in food-poisoning case

By Associated Press

September 21, 2015 | 6:34pm



weets

[Tweets & replies](#)

[Media](#)



David T. Dyjack @DTDyjack · 1h

Wow. I have to wonder if similar logic will be extended to climate and other environmental health risks.



Michigan health director ordered to trial for deaths linked to Flint water

Michigan Health Director Nick Lyon is highest-ranking official charged for Flint water issues.

[arstechnica.com](#)

Existing Leaders vs Emerging Leaders



CITIZEN SCIENTISTS



lwaspoisoned.com ABOUT FAQ WHY REPORT IT? LEARN BLOG

REPORTING YOUR CASE HELPS THOSE AROUND YOU

The leading consumer platform for reporting food poisoning.

STEP 1

Where did you eat?

Where did you get the food? e.g. Moe's *

What are your symptoms?

☐ Diarrhea

☐ Fever

☐ Nausea

☐ Vomiting

STEP 2

Description

Tell your story: Please include when you ate, what you ate, and when the symptoms started. The more details, the better.

Rate the Business

☆☆☆☆☆

FINISH REPORT

Send My Report To :

☒ Public Health

☒ Detect Outbreak

Get Alerts

☒ Get notified if v for your case

SUBMIT

TickTracker FEATURES OUR STORY ENDORSEMENTS FAQs TEAM CONTACT DOWNLOAD

How TickTrackerSM Works

00:21

Tick Sighting

See a tick? Log it and help track ticks in your area or areas you visit.

Safely Remove Ticks

Educate on how to remove and log the removal of a tick on yourself, a family member or animal.

Tick Map

Based on several data sources and real-time tick tracking with TickTracker, view the tick severity index in your area.

Tick Safety

Educate yourself about how to be more proactive in helping prevent tick bites on you, your family and animals.

EMERGING ISSUES



The 5G Health Hazard That Isn't

How one scientist and his inaccurate chart led to unwarranted fears of wireless technology.



Golden Cosmos

By [William J. Broad](#)

July 18, 2019



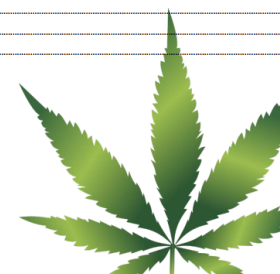
In 2000, the [Broward County Public Schools](#) in Florida received an alarming report. Like many affluent school districts at the time, Broward was considering laptops and wireless networks for its classrooms and 250,000 students. Were there any health risks to

National Environmental Health Association

Food Safety Guidance for Cannabis-Infused Products

Contents

- I. Purpose.....
- II. Introduction.....
- III. Background: Food Safety and Cannabis.....
- IV. Food Safety Considerations and State Examples.....
- V. Special Considerations.....
- VI. Definitions.....
- VII. References.....



ENVIRONMENT

Blood Tests Show Environmental Exposure To Ethylene Oxide Near Illinois Plant

ANDY MILLER, GEORGIA HEALTH NEWS • DEC 10, 2019



Federal Research on Recycled Tire Crumb Used on Playing Fields



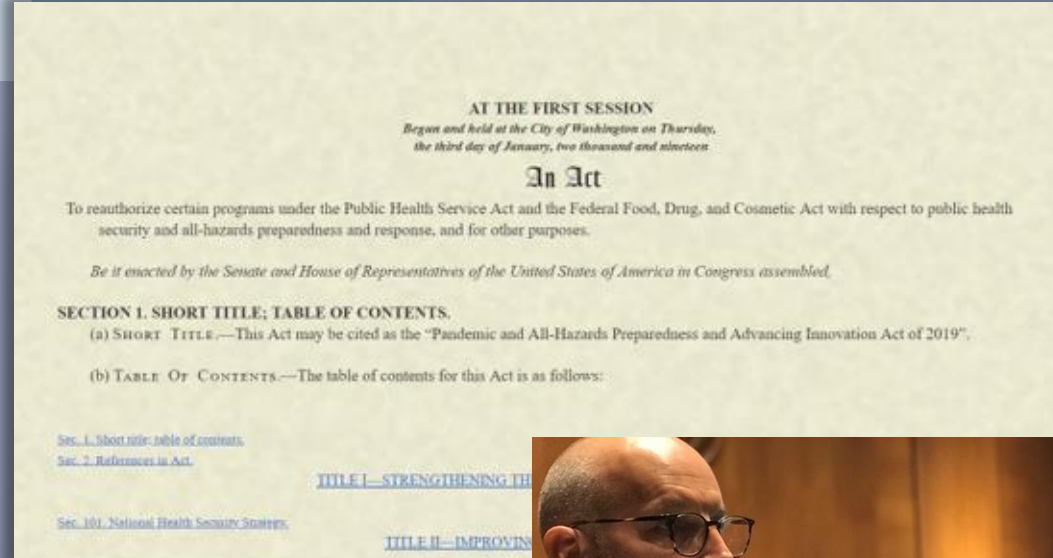
Background

Concerns have been raised by the public about the potential health risks from playing on fields in the U.S. containing tire crumb rubber. Studies to date have not shown an elevated risk from playing on fields with tire crumb rubber, but the existing studies have been limited.

To help address these concerns, the Centers for Disease Control and Prevention (CDC), the U.S. Environmental Protection Agency (EPA), and the U.S. Consumer Product Safety Commission (CPSC), launched a multi-agency effort in February 2016.



PROVIDE SOLUTIONS INSERT YOURSELF INTO POLICY DISCUSSIONS



Environmental Health is Public Health

CHAPTER 5

Workforce

Figure 5.10 | Staffing patterns (in median Full-Time Equivalents (FTEs)) at LHDs, by size of population served

<10,000	10,000–24,999	25,000–49,999	50,000–99,999
4 Total FTEs	8 Total FTEs	14 Total FTEs	28 Total FTEs
1 Registered nurse	2 Registered nurses	3.8 Registered nurses	6 Registered nurses
1 Office and administrative support staff	2 Office and administrative support staff	3 Office and administrative support staff	5 Office and administrative support staff
0.9 Agency leadership	1 Agency leadership	1 Agency leadership	1 Agency leadership
	1 Environmental health worker	1.4 Environmental health worker	3 Environmental health workers
		0.6 Health educators	1 Health educator
		0.5 Preparedness staff	1 Preparedness staff
		0.2 Nutritionist	1 Nutritionist
			1 Business and financial operations staff
100,000–249,999	250,000–499,999	500,000–999,999	1,000,000+
60 Total FTEs	119 Total FTEs	238 Total FTEs	480 Total FTEs
10 Registered nurses	17 Registered nurses	29.5 Registered nurses	48 Registered nurses
10 Office and administrative support staff	18.5 Office and administrative support staff	30.8 Office and administrative support staff	75 Office and administrative support staff
3 Agency leadership	6 Agency leadership	7.5 Agency leadership	10 Agency leadership
7 Environmental health workers	14 Environmental health workers	25 Environmental health workers	36 Environmental health workers
2 Health educators	3 Health educators	6 Health educators	12 Health educators
1 Preparedness staff	2 Preparedness staff	3 Preparedness staff	5 Preparedness staff
2 Nutritionists	4.1 Nutritionists	8 Nutritionists	19 Nutritionists
2 Business and financial operations staff	4 Business and financial operations staff	8 Business and financial operations staff	21 Business and financial operations staff
0.5 Epidemiologist	1 Epidemiologist/statistician	3 Epidemiologist/statisticians	8 Epidemiologist/statisticians
0.1 Public health physician	1 Public health physician	1 Public health physician	3 Public health physicians
	2.4 Community health worker	6.5 Community health workers	14 Community health workers
	1 Information systems specialist	2 Information systems specialist	5 Information systems specialists
	1 Public information professional	1 Public information professional	1 Public information professional
	0.2 Licensed practical or vocational nurse	2 Licensed practical or vocational nurse	4 Licensed practical or vocational nurse
		1.8 Laboratory worker	10 Laboratory worker
		1 Behavioral health staff	2.7 Oral healthcare staff

n=1,114–1,468

- ▶ Staffing patterns of LHDs vary by the size of population served.
- ▶ LHDs serving the smallest jurisdictions typically employ registered nurses, office support staff, a top executive, and environmental health workers.

- ▶ LHDs serving medium-sized jurisdictions typically also employ some additional occupations, including health educators, preparedness staff, nutritionists, business and financial operations staff, epidemiologists, public health physicians, and community health workers.

- ▶ LHDs serving jurisdictions over one million people typically employ nearly 500 FTEs including nearly 50 registered nurses, more than 75 office support staff, and many employees in specialized occupations, including information systems specialists, public information professionals, laboratory workers, and oral healthcare staff.

DEFINE OURSELVES



ADVANCEMENT OF THE PRACTICE



Uncovering Environmental Health: An Initial Assessment of the Profession's Health Department Workforce and Practice

Abstract Environmental health (EH) professionals provide critical services and respond to complex and multifaceted public health threats. The role of these professionals is continually re-emphasized by emergencies requiring rapid and effective responses to address environmental issues and ensure protection of the public's health. Given the prominence of the EH profession within the public health framework, assessing the governmental health department workforce, practice, and current and future challenges is crucial to ensure EH professionals are fully equipped and prepared to protect the nation's health. Such an

Justin A. Garding, DHA, REHS
National Center for
Environmental Health, Centers for
Disease Control and Prevention

Elizabeth Landeen
National Environmental
Health Association

Kaitlyn R. Kelly
Environmental Health Science Program,
Department of Environmental Science,
Institute of Biomedical Studies,
Baylor University

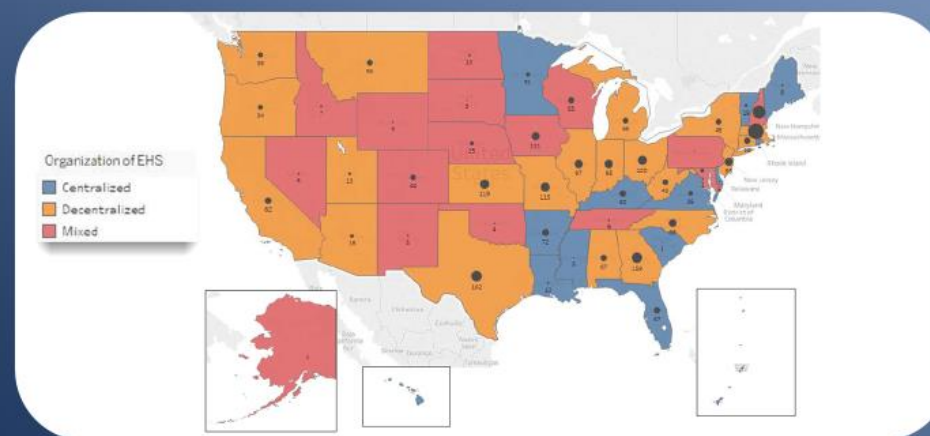
Sandra Whitehead, PhD
David T. Dyjack, DrPH, CIH
National Environmental
Health Association

John Sarisky, MPH, RS
National Center for
Environmental Health, Centers for
Disease Control and Prevention

Bryan W. Brooks, PhD
Environmental Health Science Program,
Department of Environmental Science,
Institute of Biomedical Studies,
Baylor University

System (2017), the National Environmental Health Partnership Council in the U.S. recognized the serious environmental implications resulting from emergency events such as the

EH Governance Structure & Typology



Science Exists in a Social Context

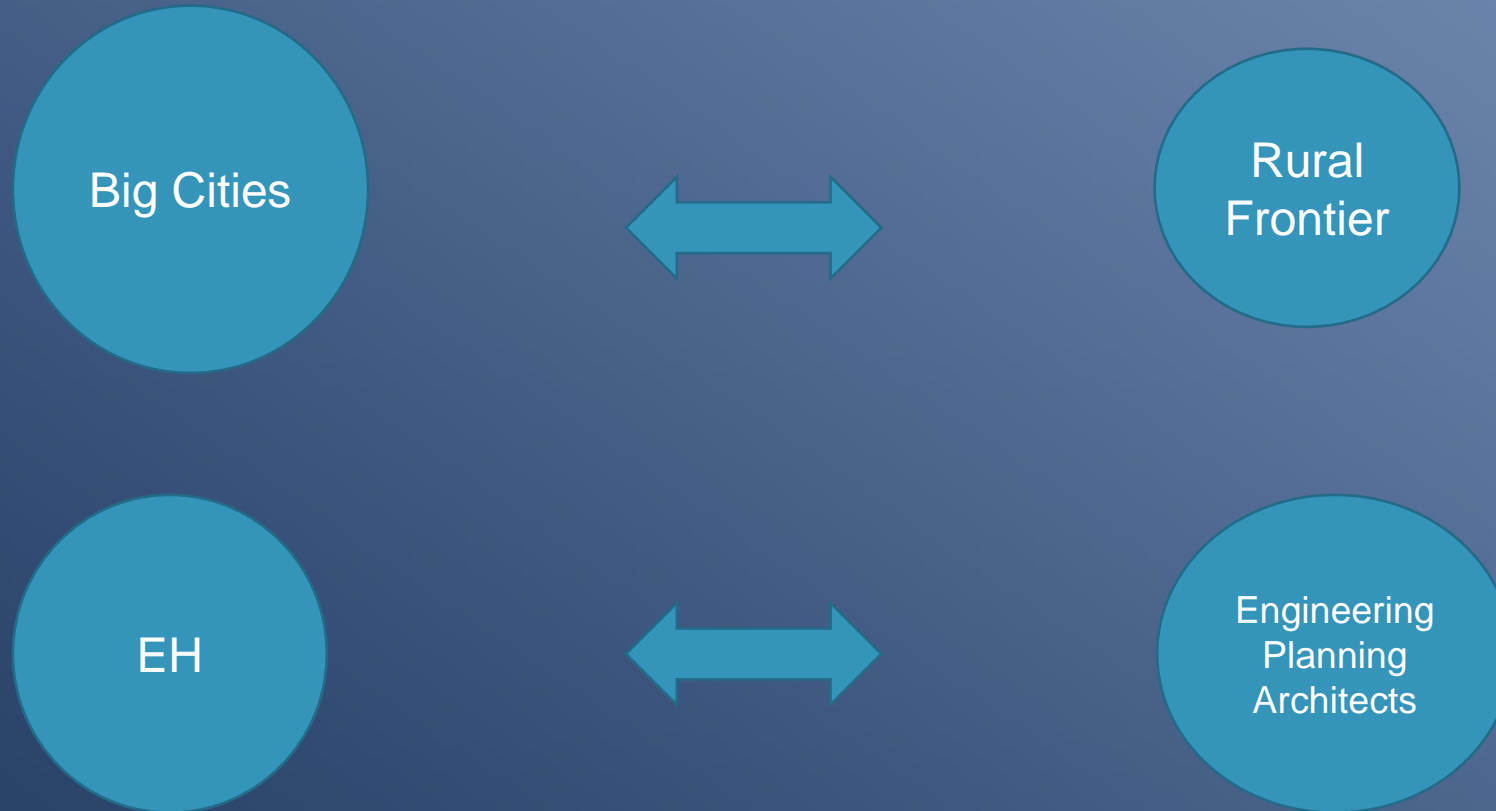
- Principle of Reciprocation - Generosity
- Principle of Commitment – Writing
- Principle of Social Proof – Early adopters/positive deviants
- Principle of Scarcity – Short Supply
- Principle of Authority – Act like a Minister of Health

Character Matters in Post-Truth Era

- 7% Content
- 38% Tone of Voice
- 55% Body Language
- Intellectual Honesty



Action is in the Space in Between



The Retail Food Safety Regulatory Association Collaborative



The Collaborative is comprised of the following associations and agencies:



ASSOCIATION OF FOOD
AND DRUG OFFICIALS



CONFERENCE FOR
FOOD PROTECTION



FOOD AND DRUG
ADMINISTRATION



NATIONAL ASSOCIATION
OF COUNTY AND CITY
HEALTH OFFICIALS



NATIONAL
ENVIRONMENTAL
HEALTH ASSOCIATION

Along with our partners at the Centers for Disease Control and Prevention.

Our work focuses on:

- A national strategy for the adoption of the latest editions of the Food Code
- Promoting and improving food safety culture
- Increasing enrollment and active participation and conformance with the Voluntary National Retail Food Regulatory Program Standards
- Improving foodborne illness outbreak investigations
- Improving food safety management systems at retail food facilities
- Enhancing effective communications and sharing of best practices among retail food protection partners

www.RetailFoodSafetyCollaborative.org

Animation



File_000.jpeg



File_001.jpeg



File_002.jpeg



IMG-5685.JPG



IMG-5686.JPG



IMG-5687.JPG



IMG-5688.JPG



IMG-5689.JPG



IMG-5690.JPG



IMG-5691.JPG



FDA Investment in local EH

FDA Announces New Cooperative Agreement Program to Advance Retail Food Safety NEHA News Release



Release Date: May 17, 2021

The Food and Drug Administration (FDA) is pleased to announce the award of the "Advancing Conformance With the Voluntary National Retail Food Regulatory Program Standards (VNRFRPS) by State, Local, Tribal, and Territorial (SLTT) Retail Food Regulatory Agencies" Cooperative Agreement to the National Environmental Health Association (NEHA).

The intended outcome of this cooperative agreement program is to advance the national integrated food safety system (IFSS) by assisting retail food regulatory programs in achieving conformance with VNRFRPS or [Retail Program Standards](#). The cooperative agreement will also help FDA to leverage NEHA's strengths to assist SLTT retail food programs in their efforts to reduce the occurrence of foodborne illness risk factors, implement and attain conformance with the Retail Program Standards, and fully leverage SLTT retail food programs strengths to advance retail food safety.

The total funding for the cooperative agreement program is expected to be up to \$40 million over 3 years. The cooperative agreement directly supports FDA's efforts to modernize the nation's retail food protection program under the New Era of Smarter Food Safety.

As part of the 3-year cooperative agreement program, NEHA will work collaboratively with FDA to achieve the following objectives:

- Develop and implement a system to administer financial assistance to SLTT retail regulatory food programs based on the FDA's VNRFRPS flexible funding model.
- Develop and implement a standardized method to assess training needs of retail food regulatory jurisdictions and facilitate meeting those needs.
- Develop and implement a tracking system that quantifies the extent of standardization of regulatory food safety inspection personnel within and among regulatory retail food jurisdictions.

According to NEHA President Sandra Long, REHS, RS, "NEHA is honored to partner with FDA on their revolutionary framework for retail food safety. We are committed to leveraging our association's unique reach and relationship with the local retail food regulatory community as we endeavor to build their capacity to ensure all families across our country enjoy the promise of

THE PATH FORWARD MY ASK OF YOU



Early Professionals

- GO WHERE THINGS ARE GOING
- EXPERIMENT RELENTLESSLY

Mid- Career

- LEARN → RELEARN
- ATTITUDE:
AVOID THE TEMPTATION
TO REGRESS
INTO A BMW

Leaders

- KNOWN → UNKNOWN
- COMMUNICATE
A NEW VISION:
FOCUS ON
PUBLIC HEALTH
- DATA →
KNOWLEDGE →
WISDOM
- SEEK GROWTH:
1) PERFORMANCE
2) DISTINCTIVE IMPACT
3) CREATIVITY
4) PEOPLE; WOMEN

EVERYONE

- AGILITY
- HOW ARE WE
SEEN BY
THOSE WHO
MIGHT WORK
WITH US?
- BE YOURSELF

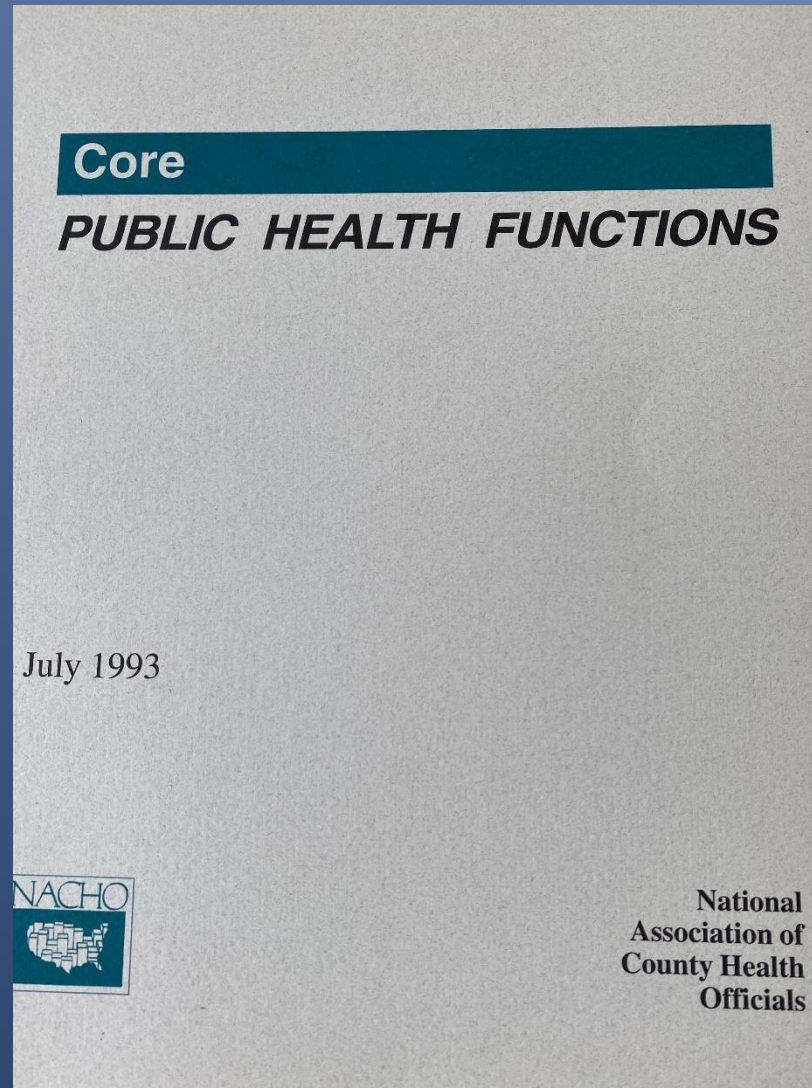
THE
WORLD
WORSHIPS
ORIGINALITY

EH as Meta Leaders

- Describe & Prescribe
- Compress Morbidity
- Hotbeds of Innovation



Conclusion



Thank You

