



AMCO
PRODUCTION UNIT



A Letter from Teller

David T. Dyjack, Dr.PH, CIH
Chief Executive Officer

September 2024

The Final Frontier



Honey Buckets & Settling Ponds



Landfills & Melting Permafrost



Pb-Acid Batteries





The EHS Isthmus

Compliance

CWA
CAA
SARA
SDWA
Cal-OSHA
MSHA
TSCA
FDCA

Conformance


Climate
Heat
EPR&R
Vector
1-Health
DMI & AI
IAQ
Water/Drought
Psychological Safety
Mental Health
Citizen Science/DIY
Synergistic Exposures
Well-being & Longevity

We are here.

How we think about ourselves

- Protecting
- Helping
- Collaborating
- Leading & Innovating

A new conceptualization of the professional practice of environmental health: an Australian qualitative study

Louise Dunn ^a, Llewellyn Mann^b and Karen Farquharson^c

^aSchool of Science, Computing and Engineering Technologies, Swinburne University of Technology, Hawthorn, Australia; ^bLearning Transformations Unit, Swinburne University of Technology, Hawthorn, Australia; ^cSchool of Social and Political Sciences, University of Melbourne, Melbourne, Australia

ABSTRACT

Environmental health professionals play a significant role in preventing and addressing public health problems. Improving this area of practice continues to be a key strategy of the Australian Government; however, achieving this outcome presents several challenges. These challenges relate to the changing context of the practice and the complexities inherent in the practice itself. To address this problem, we investigated the qualitatively different ways environmental health professionals experienced their practice in Australia to establish a new conceptualization of practice. Phenomenographic qualitative methods underpinned this study, involving open-ended, semi-structured interviews with 19 environmental health professionals from diverse backgrounds and practice settings. The study revealed four qualitatively different ways of experiencing the professional practice of environmental health: 'protecting', 'helping', 'collaborating', and 'leading and innovating'. These different ways were logically linked by five themes of expanding awareness to form a Holistic Experiential Description of Practice (HEDP), representing a new and novel conceptualization of the professional practice of environmental health. We propose that these findings provide a more useful way to

ARTICLE HISTORY

Received 13 March 2024

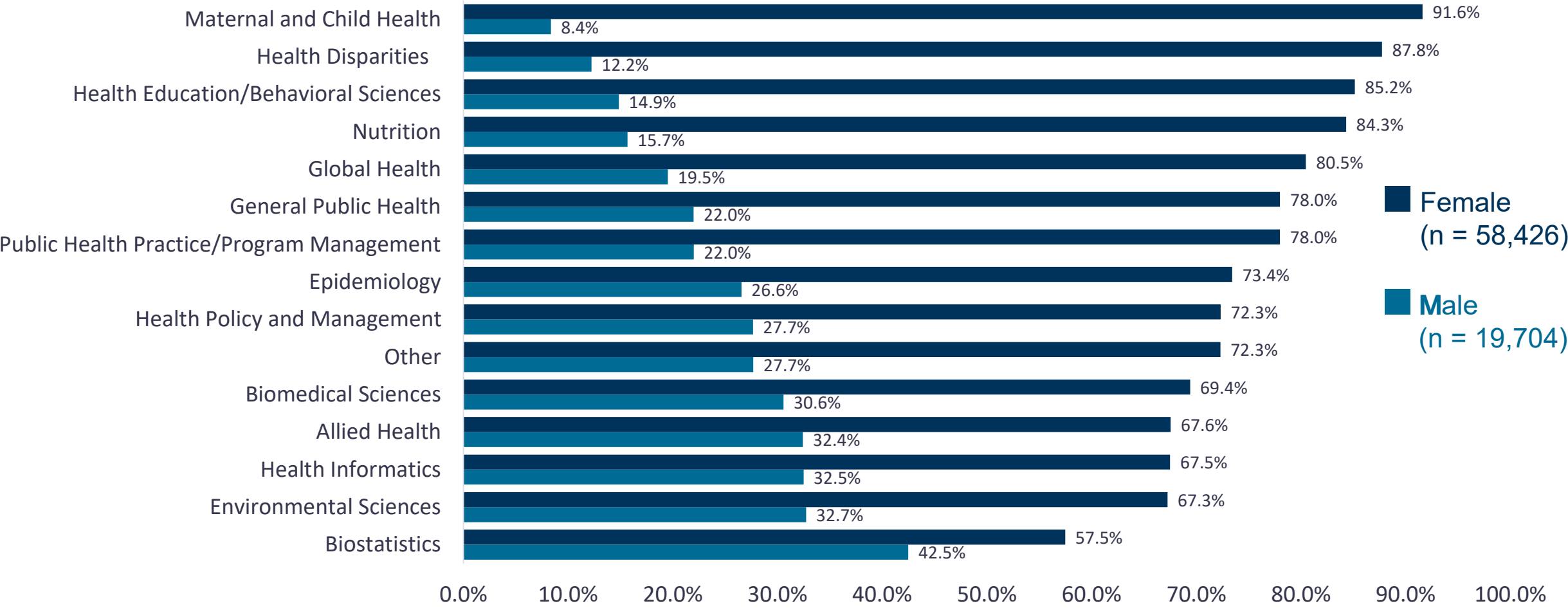
Accepted 11 May 2024

KEYWORDS

Environmental health; professions; practice; phenomenography; qualitative

Public Health Gender Distribution by Program Area

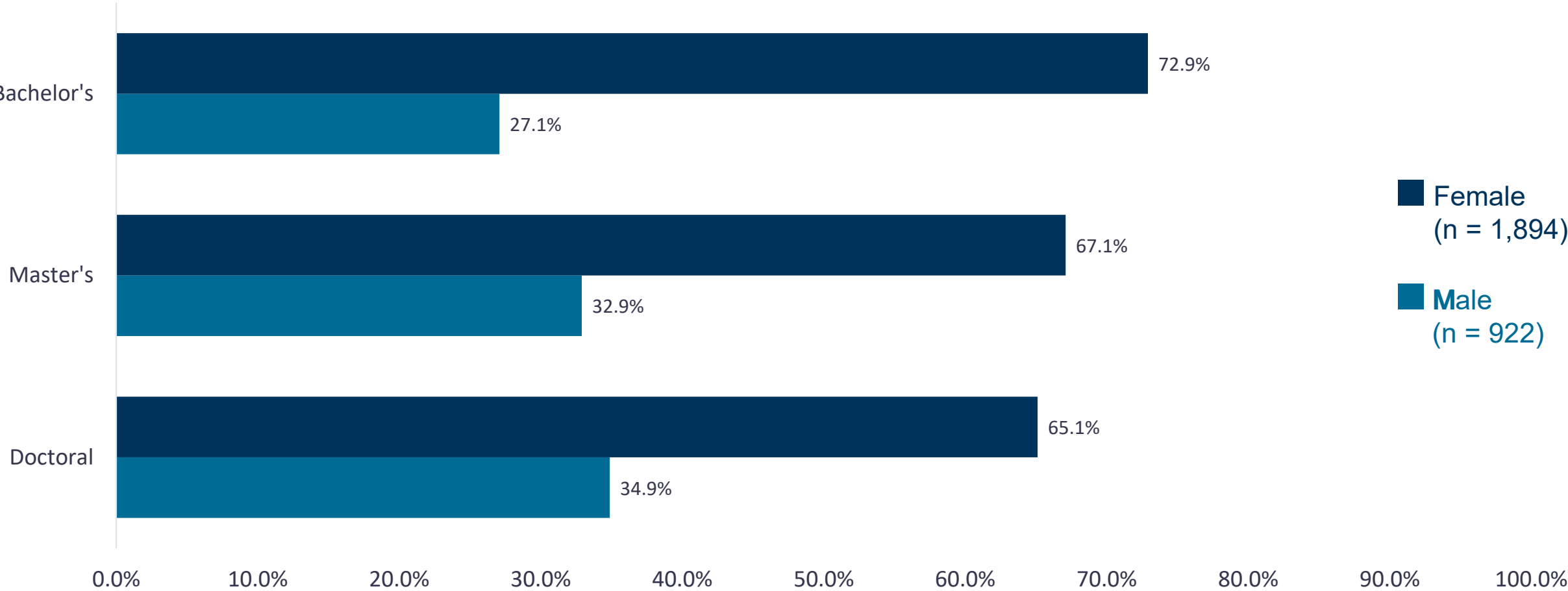
Students enrolled in a CEPH-accredited degree program for the 2023 – 2024 Fall Term.



*Enrollments for Other/Unknown gender have been removed due to low n.

Environmental Science Gender Distribution by Degree Level

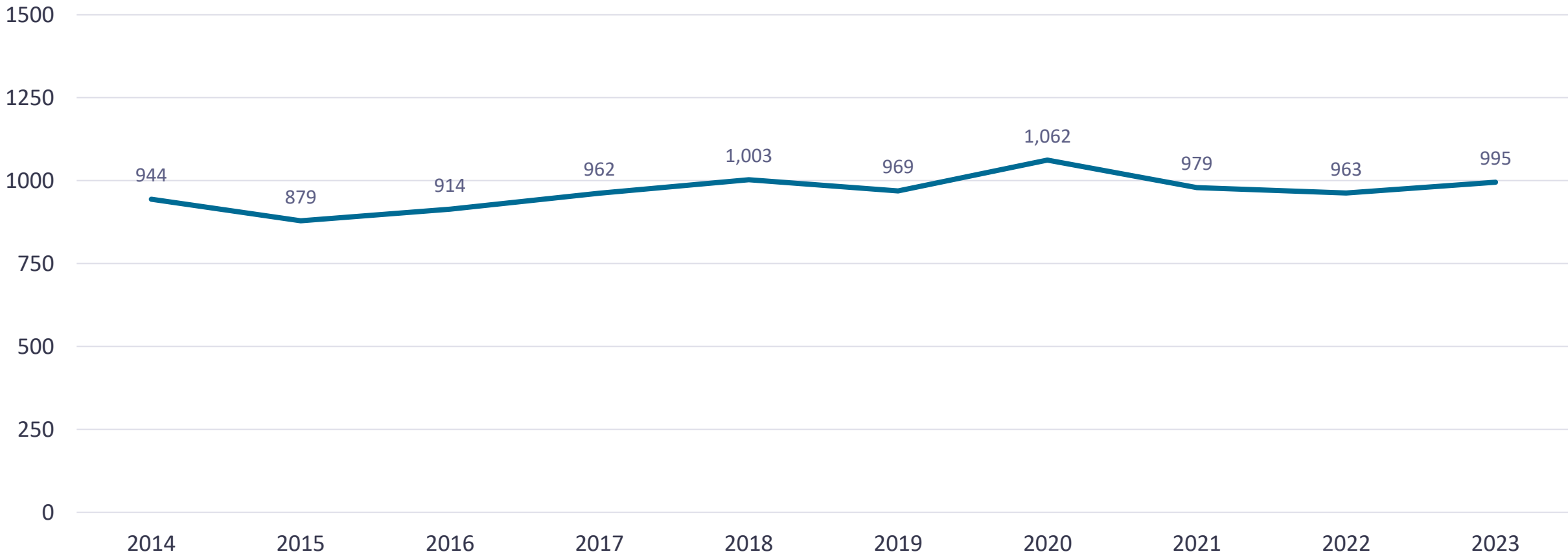
Students enrolled in an environmental sciences degree program for the 2023 – 2024 Fall Term.



**Enrollments for Other/Unknown gender have been removed due to low n.*

Environmental Science Graduates

Count of completions for environmental science degree programs (2014-2023).

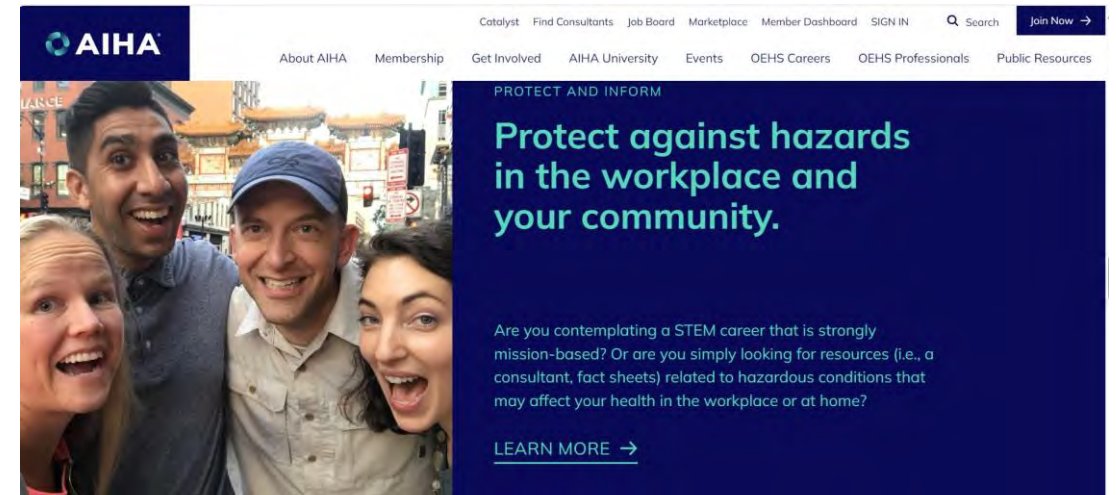


EHS Exists in a Social Context

Source: Robert Cialdini, Ph.D.

- Principle of Reciprocation - Generosity
- Principle of Commitment – Writing
- Principle of Social Proof – Early adopters/positive deviants
- Principle of Authority – Act like a Local Health Official
- Principle of Commitment & Consistency- ppl loathe uncertainty
- Principle of Unity – all of us are smarter than one of us

Data doesn't change minds – relationships do





Effective Communications

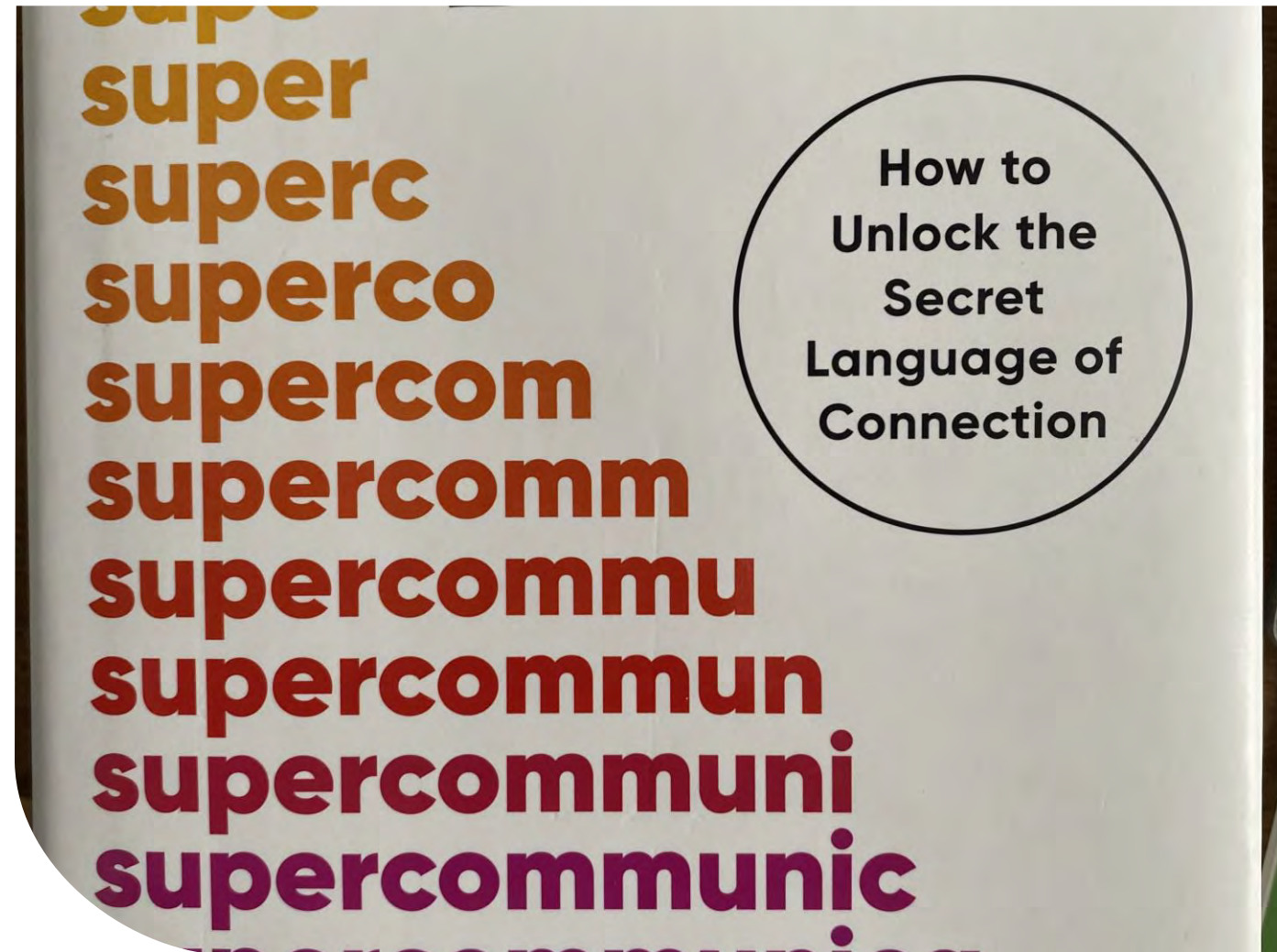
1. What's this really about? (Practical)
2. How do we feel? (Emotional)
3. Who are we? (Social)

Rule 1: Pay attention to what kind of conversation is happening

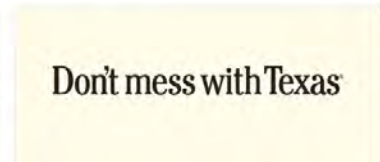
Rule 2: Share your goals; and ask what others are seeking

Rule 3: Ask about others feelings, and share your own.

Rule 4: Explore if identities are important to the discussion

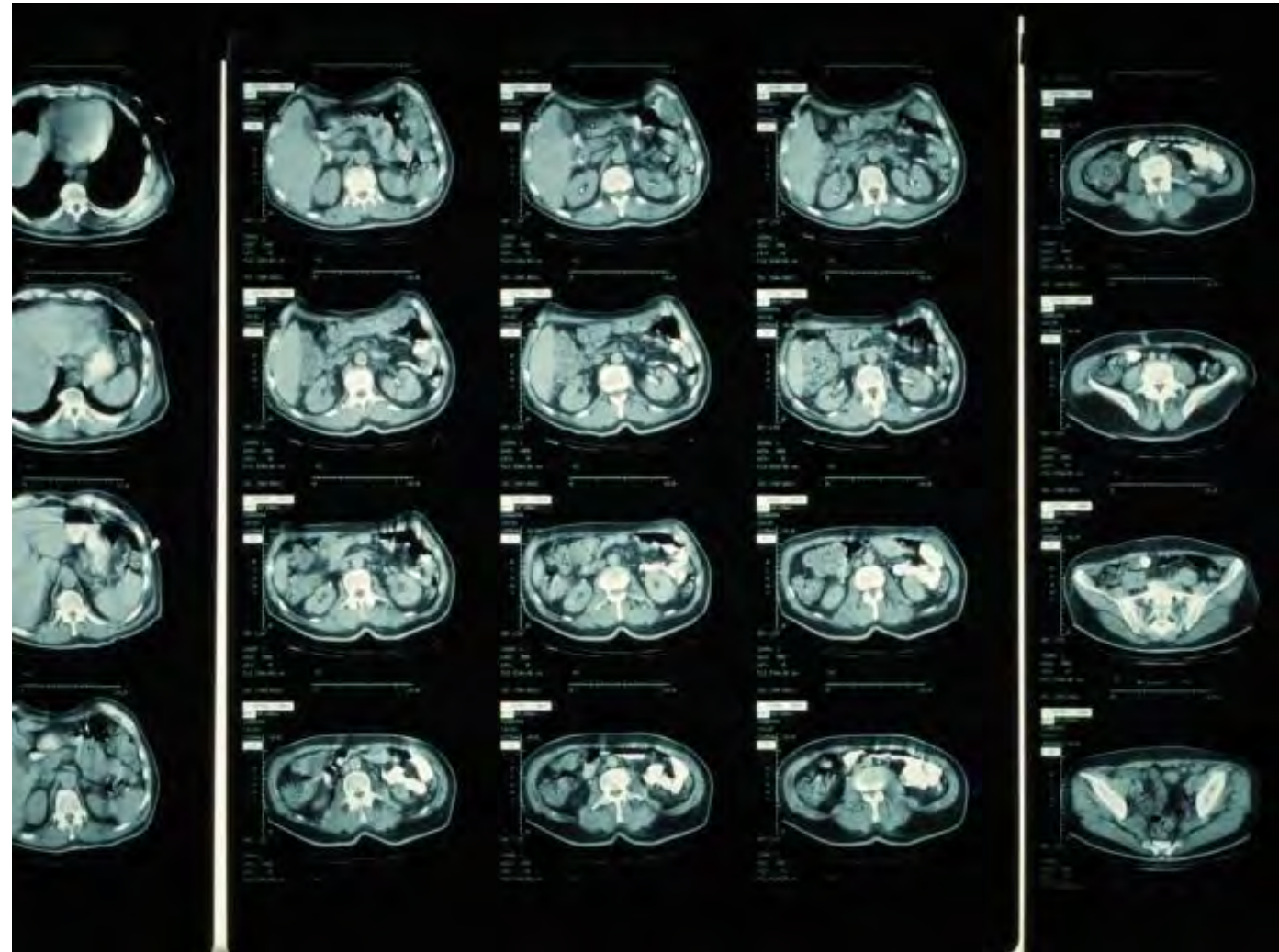


Power of Emotion



Put a Face On It

- Israeli Research
- 100 CT Scans Reviewed (1/2 MDs were shown patient photos and 1/2 did not)
- 3 months later – repeat process
- Abnormality detection improved 53% when shown patient photo
- Abnormality detection declined 28% when patient photo not provided



Source: Adam Grant; Give & Take. PP 167.

Information

- Information is a Social Determinant of Health

HEALTH

Public Health Enters the Era of Infodemiology

Misinformation can thwart the work of public health. Leaders from the field are bringing the mindset they use to detect and contain disease to the rapid, far-reaching spread of an information epidemic.

Aug 23, 2023 • Carl Smith



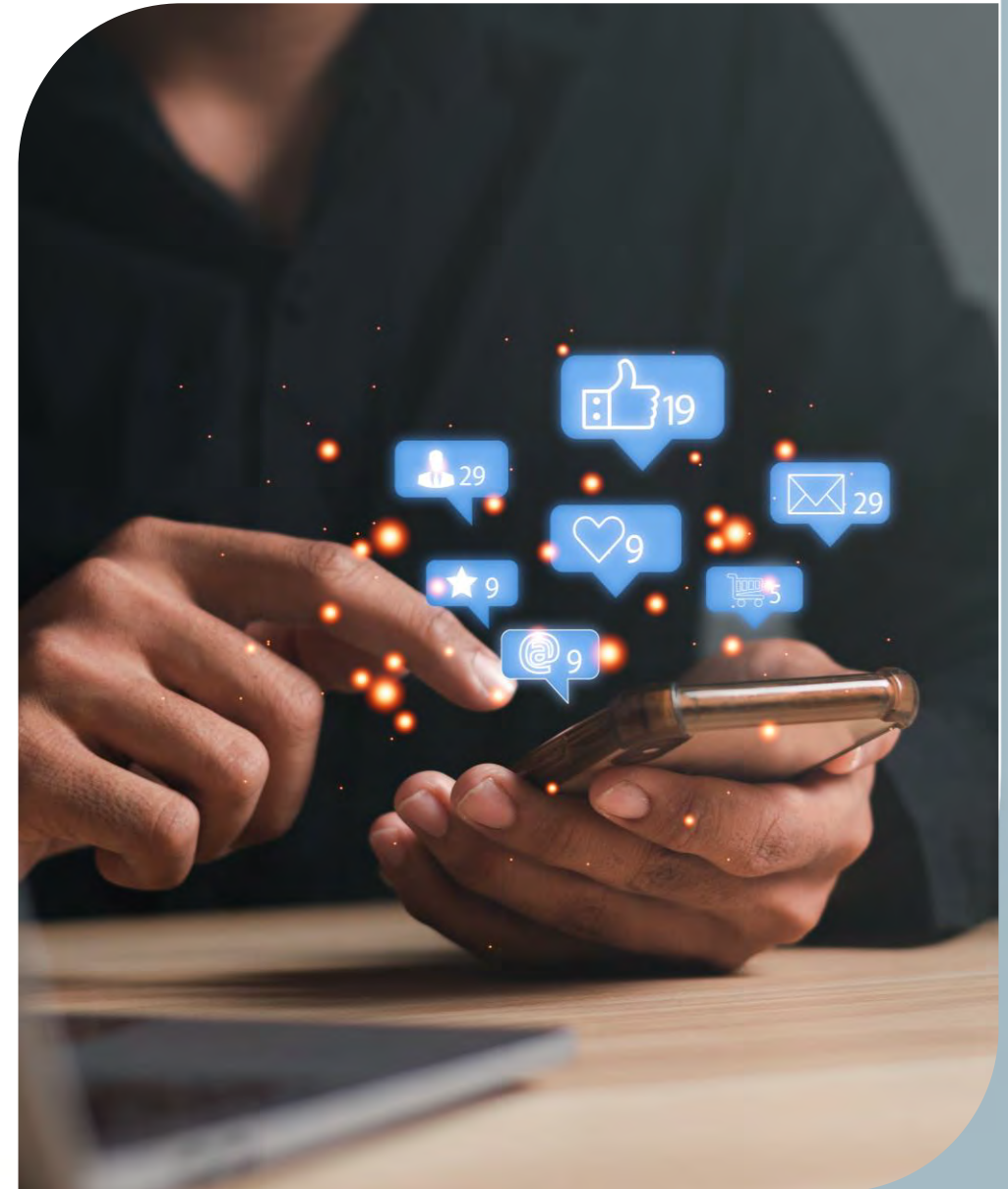
A public health nursing office in Green Bay, Wis., circa 1920. (Library of Congress)

Social Media Platforms

- 2 billion monthly users
- ~60% of American adults report searching for Health Information online
 - 86% use smart phones
 - 69% use Facebook
 - 29% use Twitter

“A lie can spread around the world before truth gets its pants on.”

-Winston Churchill



New Era: Information as a SDOH

- Know your local information ecosystem.
- Accept that misinformation will travel further, faster and deeper than truth – 6x faster
- People's relationship to information is emotional
- Misinformation travels faster in places where people feel safe
- Listen
- Legitimate Concerns Exist
- Open a Tip Line
- Communication is a 2-way street





National Environmental
Health Association

Leadership: The Hard Facts of Soft Skills

Part 1 - Tuesday, October 1, 2024

Mal, Dis and Mis: A primer on the evils of the current information ecosystem

Part 2 - Tuesday, October 8, 2024

Effective Messaging: For the environmental and public health professional

Part 3 - Tuesday, October 15, 2024

Social and Emotional Intelligence: Essential skills for managing yourself and working with others

Part 4- Tuesday, October 22, 2024

Meet the Media: Before your worst day

Citizen Science: Iwaspoisoned.com



By the Numbers

800k

Foodborne Illness Reports

1,000+

Outbreak/Clusters

500+

Industry + Public Health Agency Subscribers

180k

Consumers Subscribers

170

Countries

7

Languages

70 million

Email Alerts to Subscribers



HEALTHIER WORKPLACES | A HEALTHIER WORLD

NEW AIHA HEAT STRESS APP

Introduction & Overview

AIHA'S RESPONSE

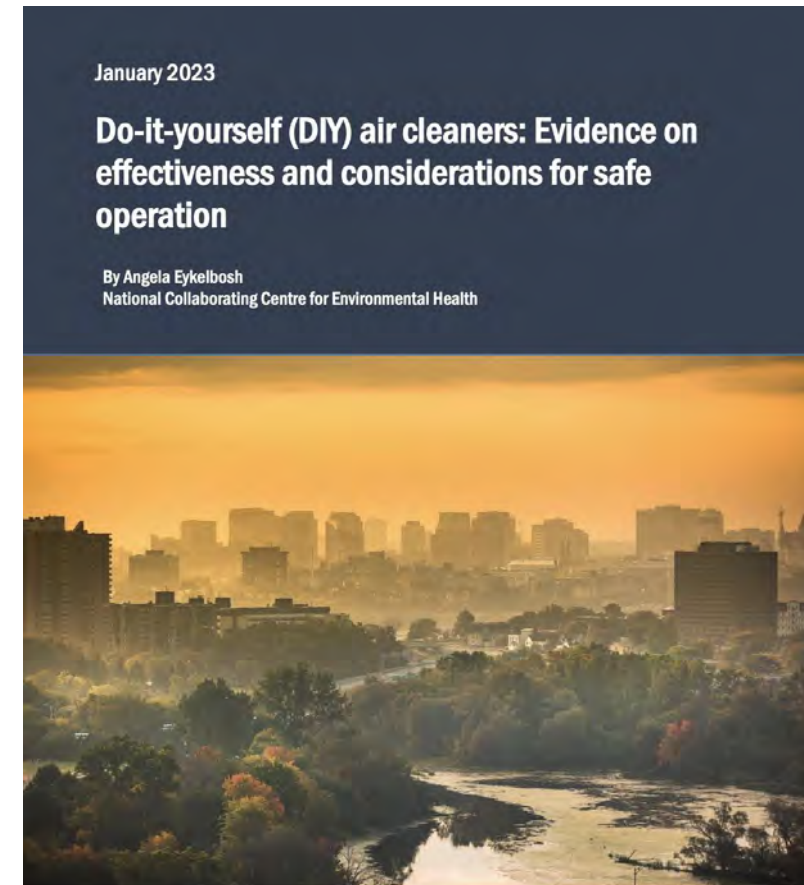
- Proposed by the [AIHA Thermal Stress Working Group](#) (open to anyone)
- A FREE app compatible with both iOS and Android platforms
- No pop-up ads
- Available in English, Spanish, Portuguese, and French
- Ability to pull live weather data from your local National Weather Service
- Risk stratification for workers
- Educational information
- Resources for help

The BREATHE Project



Building Resilience to Emerging Airborne Threats and Heat Events

- Evolved from a 2023 evidence review by Dr. Angela Eykelbosh at the NCCEH
 - DIY Air Cleaners are effective, affordable and accessible alternatives
- Goal: **mobilize** this important information using health equity lens
- Target those at greater risk from **wildfire smoke exposure**
 - Older adults, pregnant people, people with existing health conditions
 - Exposure increases risk of morbidity and mortality



National Collaborating Centre
for Environmental Health
Centre de collaboration nationale
en santé environnementale

ncceh.ca

Why DIY Air Cleaners?



- A **robust evidence synthesis by Angela Eykelbosh (2023)** determined that these units were effective at removing a range of particulates from air including PM2.5, pollen, dust, mould spores, viruses and bacteria.
- **DIY air cleaners are effective, affordable, and accessible.**
- 1x1 units (one fan x one filter) are practical and cost-effective for smaller spaces and urban settings.

Study	Design (n)	Filter type	CADR (cfm)	Cost per CADR	CADR per watt (cfm/W)	Noise (dB)
Holder et al. ¹⁰	1x1 (n=1)	MERV-13	156	<u>\$0.29</u>	2.0	62
	2x1 (n=1)	MERV-13	263	\$0.21	3.5	61
	4x1 (n=1)	MERV-13	401	\$0.18	5.3	55
	Commercial unit (n=1)	HEPA	119	<u>\$1.03</u>	2.9	51



Cost per Clean Air Delivery Rate (CADR) much lower for DIY units

Reference: Eykelbosh, A. (2023). *Do-it-yourself (DIY) air cleaners: Evidence on effectiveness and considerations for safe operation.*



CORNERSTONE VALUES: EQUITY • INNOVATION • ENGAGEMENT
VISION: EQUITY AND OPTIMAL HEALTH FOR ALL



OUR PRIORITIES AND VISION FOR TRANSFORMATIONAL HEALTH



I. HEALTH AND WELLNESS

All Washingtonians have the opportunity to attain their full potential of physical, mental, and social health and well-being.



II. HEALTH SYSTEMS AND WORKFORCE TRANSFORMATION

All Washingtonians are well served by a health ecosystem that is robust and responsive, while promoting transparency, equity, and trust.



III. ENVIRONMENTAL HEALTH

All Washingtonians will thrive in a broad range of healthy environments — natural, built, and social.



IV. EMERGENCY RESPONSE AND RESILIENCE

All Washington communities have the information and resources they need to build resilience in the face of myriad public health threats and are well-positioned to prepare for, respond to, and recover from emergencies and natural disasters.



V. GLOBAL AND ONE HEALTH

All Washingtonians live in ever-connected environments that recognize and leverage the intersection of both global and domestic health as well as the connections of humans, animals, and the environment.

TRANSFORMATIONS IN ACTION



INNOVATION AND TECHNOLOGY



COMMUNITY CENTERED



VISIBILITY AND VALUE



EQUITY DRIVEN

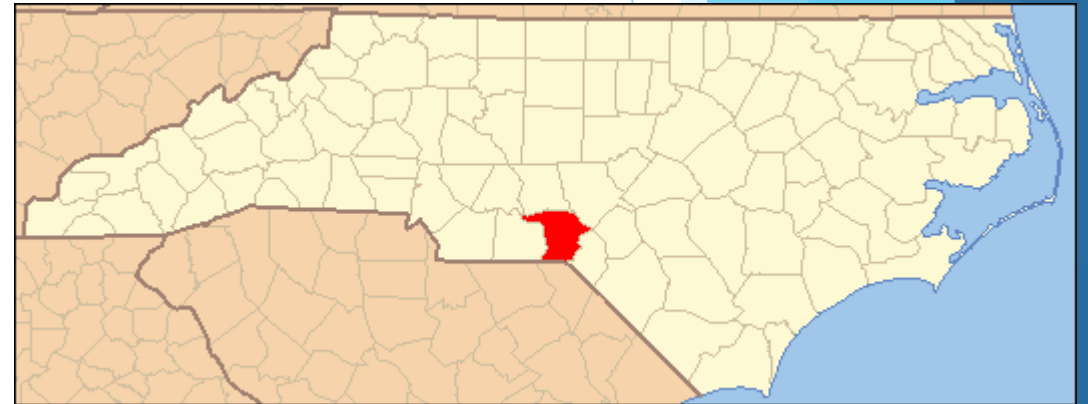


COLLABORATIVE ENGAGEMENT

CORNERSTONE VALUES: EQUITY • INNOVATION • ENGAGEMENT
VISION: EQUITY AND OPTIMAL HEALTH FOR ALL

RICHMOND COUNTY, NORTH CAROLINA

- RURAL COUNTY
- ~42,000 POPULATION
- 200 FOOD SERVICE ESTABLISHMENTS
- 2 FTES IN THE FOOD PROTECTION PROGRAM



Enhancing Local Environmental Public Health in Nebraska

The Nebraska Association of Local Health Directors (NALHD) is coordinating a 5-year project to support and maximize local health department (LHD) capacity in 3 selected environmental health areas. LHDs are leveraging their portion of Nebraska's CDC Public Health Infrastructure Grant (PHIG) to accomplish more together.

19 Tribal & Local HDs

92 of 93 counties



\$70,000/year

Annual awards to T&LHDs



Preventing childhood lead poisoning

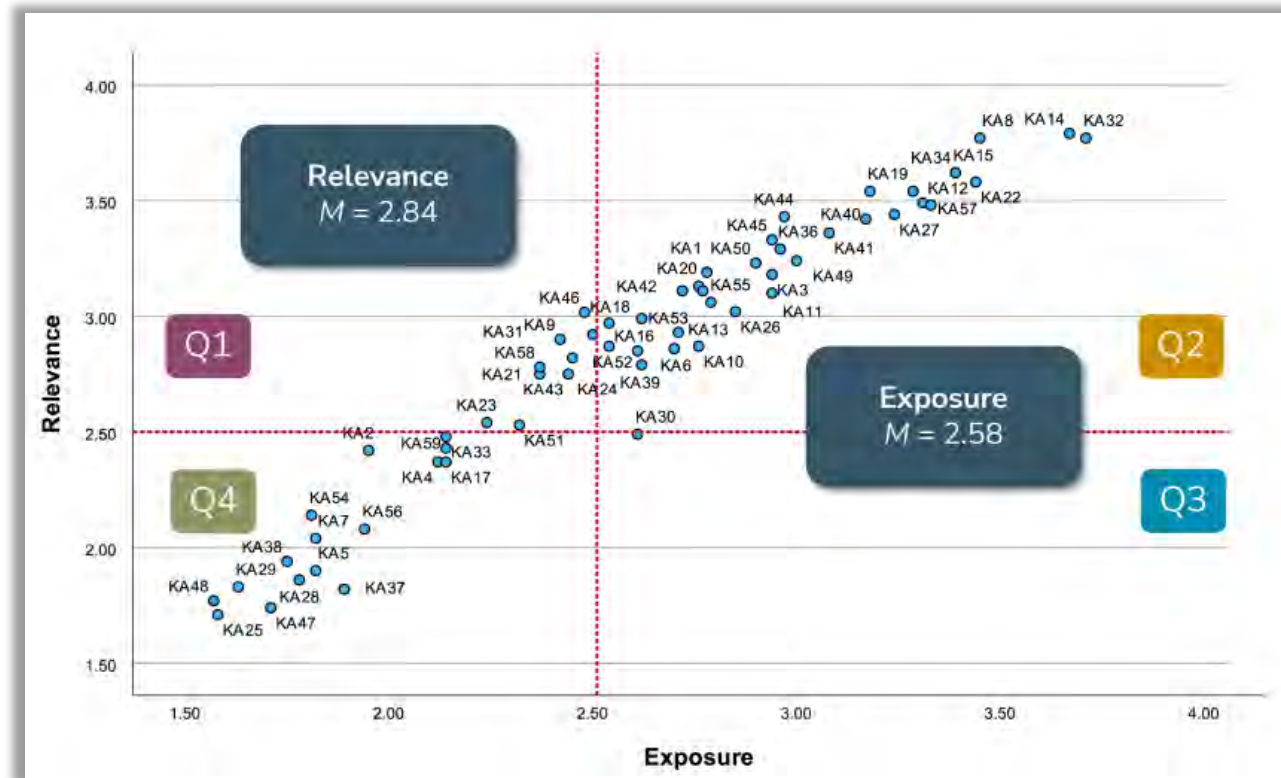
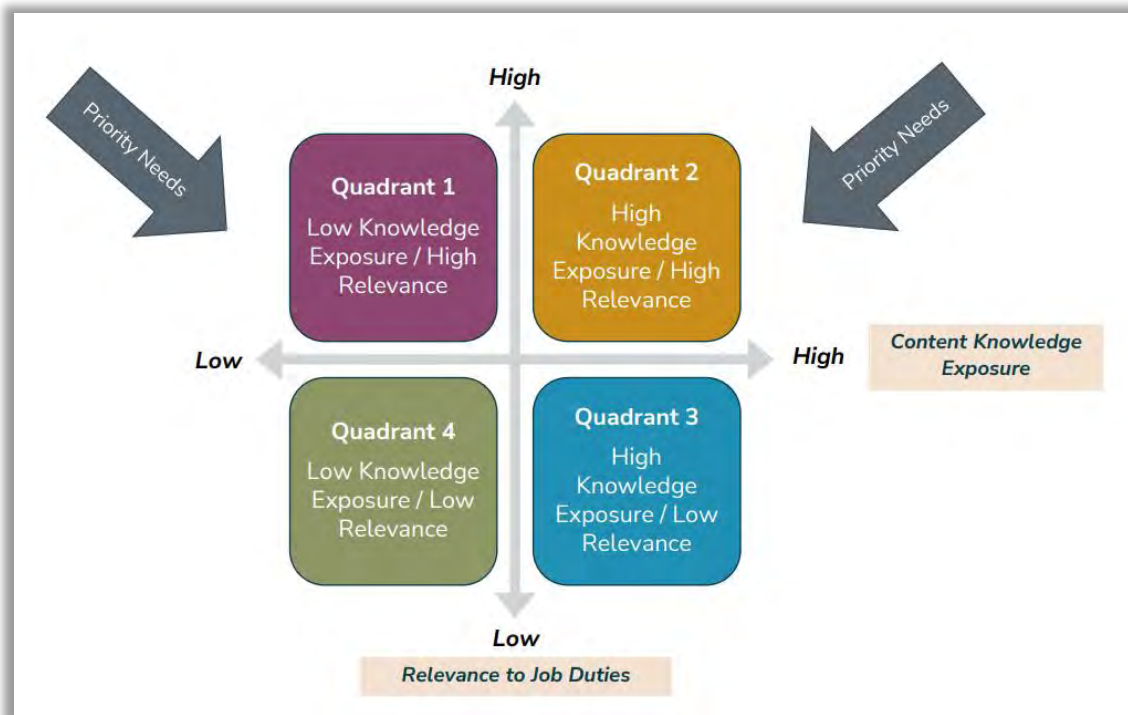


Reducing health impacts of poor air quality



Promoting safe drinking water



Decoding Training Needs: Using Relevance and Exposure to Identify Training Needs in the Retail Food Regulatory Workforce



Fahnestock, L., Streuli, S., Gill, G., DeVito, R., DeFrancesco, J., Baker, R., Randhawa, M., & Dyjack, D. (2024). Decoding training needs: Using Relevance and Exposure to Identify Training Needs in the Retail Food Regulatory Workforce. *Journal of Environmental Health*, 87(1): 24–32.

Research Paper

Foodborne Outbreak Rates Associated with Restaurant Inspection Grading and Posting at the Point of Service: Evaluation Using National Foodborne Outbreak Surveillance Data

THUY N. KIM¹  <https://orcid.org/0000-0001-6470-7046>,^{1*} LAURA WILDEY,² BRIGETTE GLEASON,³ JULIA BLESER,⁴ MELANIE J. FIRESTONE⁵  <https://orcid.org/0000-0003-2244-3729>,¹ GINA BARE,² JESSE BLISS,² DANIEL DEWEY-MATTIA,³ HARLAN STUEVEN,⁵ LAURA BROWN,⁶ DAVID DYJACK,² AND CRAIG W. HEDBERG¹

¹University of Minnesota School of Public Health, Division of Environmental Health Sciences, 420 Delaware Street S.E., MMC 807, Minneapolis, Minnesota 55455; ²National Environmental Health Association, 720 South Colorado Boulevard, 1000N, Denver, Colorado 80246; ³National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30329; ⁴National Network of Public Health Institutes, 1300 Connecticut Avenue N.W., no. 150, Washington, DC 20036; ⁵Dining Safety Alliance, 200 Union Boulevard, Suite 200, Lakewood, Colorado 80228; and ⁶National Center for Environmental Health, Centers for Disease Control and Prevention, 4770 Buford Highway N.E., MS F58, Atlanta, Georgia 30341, USA

MS 22-007: Received 11 January 2022/Accepted 14 February 2022/Published Online 17 February 2022

ABSTRACT

A previously conducted national survey of restaurant inspection programs associated the practice of disclosing inspection results to consumers at the restaurant point of service (POS) with fewer foodborne outbreaks. We used data from the national Foodborne Disease Outbreak Surveillance System (FDOSS) to assess the reproducibility of the survey results. Programs that participated in the survey accounted for approximately 23% of the single-state foodborne illness outbreaks in restaurant settings reported to FDOSS during 2016 to 2018. Agencies that disclosed inspection results at the POS reported fewer outbreaks (mean = 0.29 outbreaks per 1,000 establishments) than those that disclosed results online (0.7) or not at all (1.0). Having any grading method for inspections was associated with fewer reported outbreaks than having no grading method. Agencies that used letter grades had the lowest numbers of outbreaks per 1,000 establishments. There was a positive association (correlation coefficient, $R^2 = 0.29$) between the mean number of foodborne illness complaints per 1,000 establishments, per the survey, and the mean number of restaurant outbreaks reported to FDOSS ($R^2 = 0.29$). This association was stronger for bacterial toxin-mediated outbreaks ($R^2 = 0.35$) than for norovirus ($R^2 = 0.10$) or *Salmonella* ($R^2 = 0.01$) outbreaks. Our cross-sectional study findings are consistent with previous observations that linked the practice of posting graded inspection results at the POS with reduced occurrence of foodborne illnesses and outbreaks associated with restaurants. Support for foodborne illness surveillance programs and food regulatory activities at local health agencies is foundational for food safety systems coordinated at state and federal levels.

Contents lists available at ScienceDirect

Journal of Food Protection

journal homepage: www.elsevier.com/locate/jfp



ELSEVIER



Research Note

Investing in Retail Food Safety: Assessing the NEHA-FDA Retail Flexible Funding Model Grant Program's Distribution Through an SDOH Lens

Gagandeep Gill^{*}, Lindsay Fahnestock, Roseann DeVito, Chintan K. Somaiya, Samantha Streuli, Daniela Ramirez, Rance Baker, Art Johnstone, David Dyjack, Manjit Randhawa

National Environmental Health Association, USA

ARTICLE INFO

Keywords:

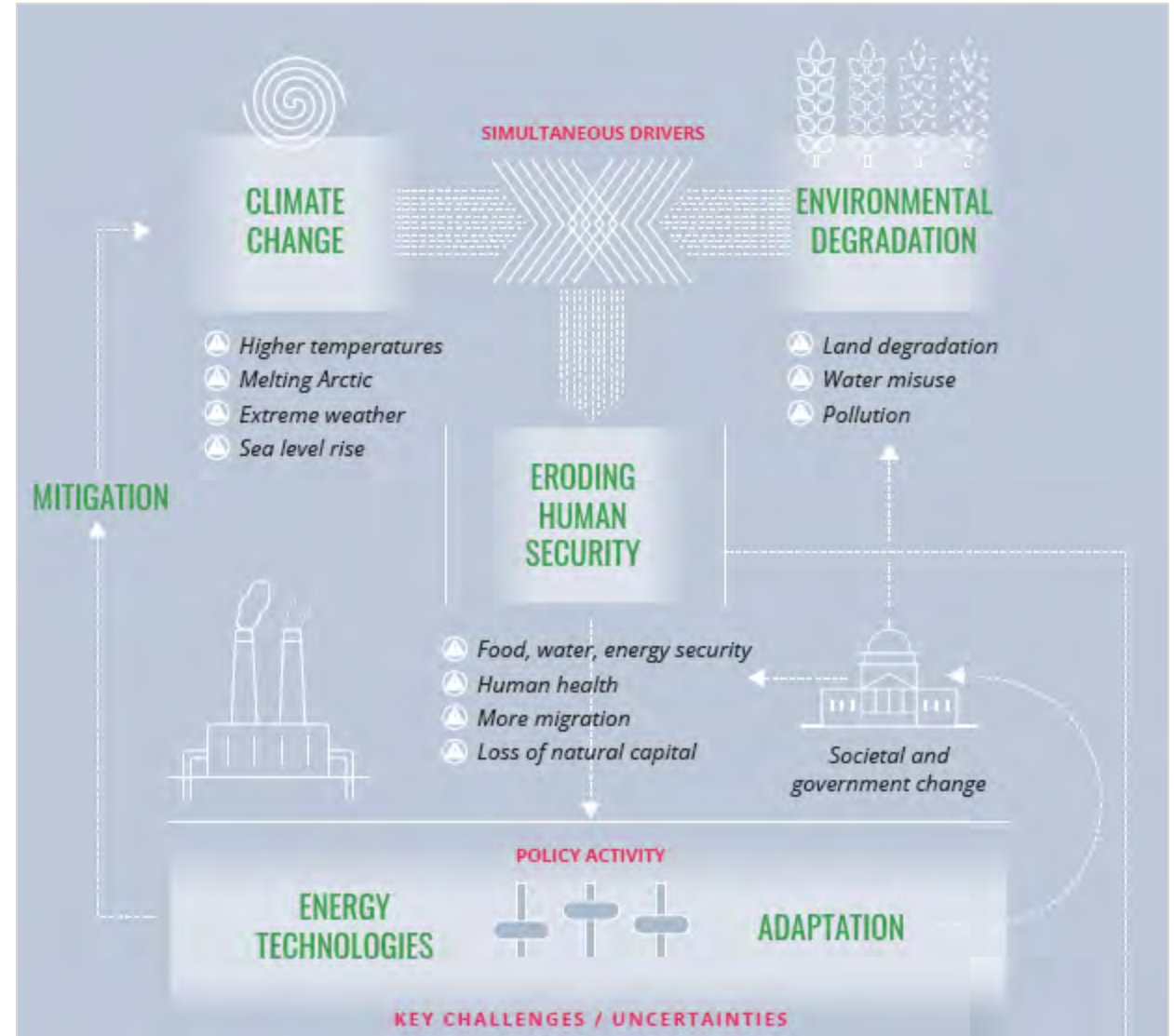
Food Safety
Geographic Information Systems
Mapping
Public Health
Retail Program Standards
Social Determinants of Health

ABSTRACT

Social Determinants of Health (SDOH) have a major impact on community health and quality of life. Healthy People 2030 has an increased focus on SDOH, given their contribution to health disparities and inequalities as a social phenomenon. Despite advances in food hygiene and sanitation, structural disparities related to SDOH leave food systems vulnerable.

The Voluntary National Retail Food Regulatory Program Standards (VNRFRPS), otherwise known as the Retail Program Standards initiative is part of the Food and Drug Administration (FDA)'s strategy for prevention-based food safety to reduce foodborne illness. The National Environmental Health Association (NEHA) and the U.S. Food and Drug Administration (FDA) work in partnership to administer the NEHA-FDA Retail Flexible Funding Model (RFFM) Grant Program. The program provides funding to State, Local, Tribal, and Territorial (SLTT) retail food regulatory agencies as they achieve and advance conformance with the VNRFRPS. In its first year (Calendar Year 2022) of the 3-year cycle, the grant program awarded \$6.87M in funding to over 200 jurisdictions nationwide.

The Future Will Need EHS More than Ever



EHS remains Profoundly Local

- Vector Control
- Workplaces/Remote Work
- Tap Water – Trace Pharmaceuticals
- Retail Food
- IAQ/Legionella
- ECE/Schools
- Health Care/LTC
- Septic
- Tattoo & Cannabis
- Mental Health
- Microplastics
- Heat Stress
- Wildfire

Lead, arsenic and other heavy metals in tampons prompt FDA investigation

By Sandee LaMotte, CNN

Updated 8:10 PM EDT, Tue Sep 10, 2024



Image Source/Getty Images

Organic and nonorganic tampons contain arsenic and lead, a July pilot study found. The FDA will conduct research on the possible impact of heavy metals in the products.

(CNN) — The US Food and Drug Administration announced Tuesday that it will examine the potential harm to women of heavy metals such as lead and arsenic found in tampons.

CIH/CSP

- Access/Axis/Affect
- Chief Science Officer
- What keeps people up at night?



AMERICAN SOCIETY OF
SAFETY PROFESSIONALS

MEMBERSHIP

EDUCATION

STANDARDS

PUBLICATIONS

ADVOCACY

NEWS

MEMBERSHIP →

We are the community that protects people, property and the environment.

As a member, you gain access to professional communities, exclusive content, savings, development opportunities and support for every stage of your safety career.

Lithium-ion battery fires are happening more often. Here's how to prevent them

By [Samantha Murphy Kelly](#), CNN Business

Updated 11:40 AM EST, Thu March 9, 2023



'It literally explodes': E-bike's battery blamed for fire th...

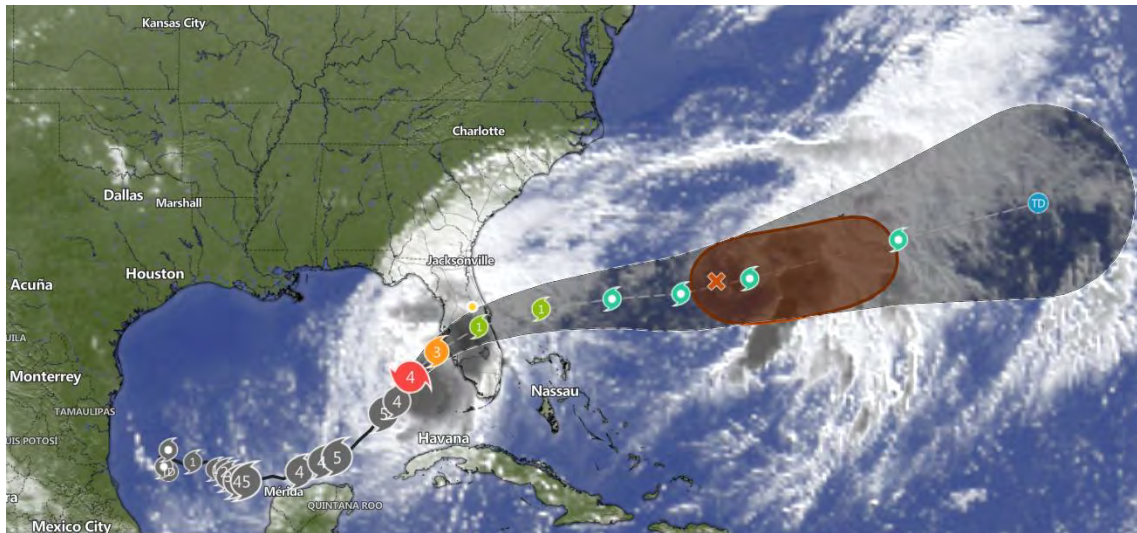
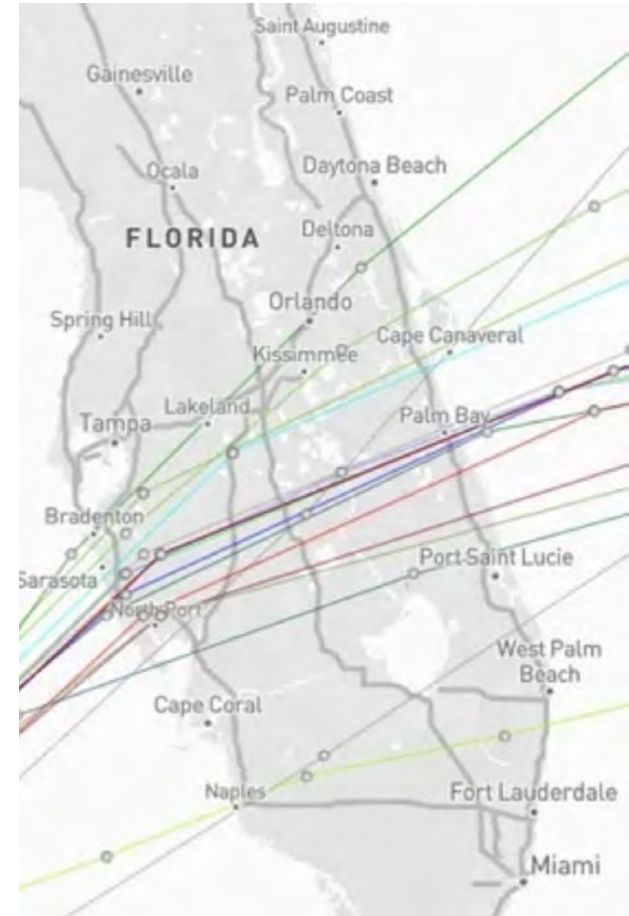
01:21 - Source: CN

'It literally explodes': E-bike's battery blamed for fire that destroyed building

(CNN) — Lithium-ion batteries, found in many popular consumer products, are under scrutiny again following a massive fire this week in New York City thought to be caused by the battery that powered an electric scooter.

Embrace our Moment: EH as PH Meta Leaders

Describe & Prescribe
Compress Morbidity
Hotbeds of Innovation



Andy Warhol meets Robert Frost

- Commercial Art
- Pop Art
- Portraits & Images



Blue Butterfly Day

EHS Professionals: This is (y)our time.

