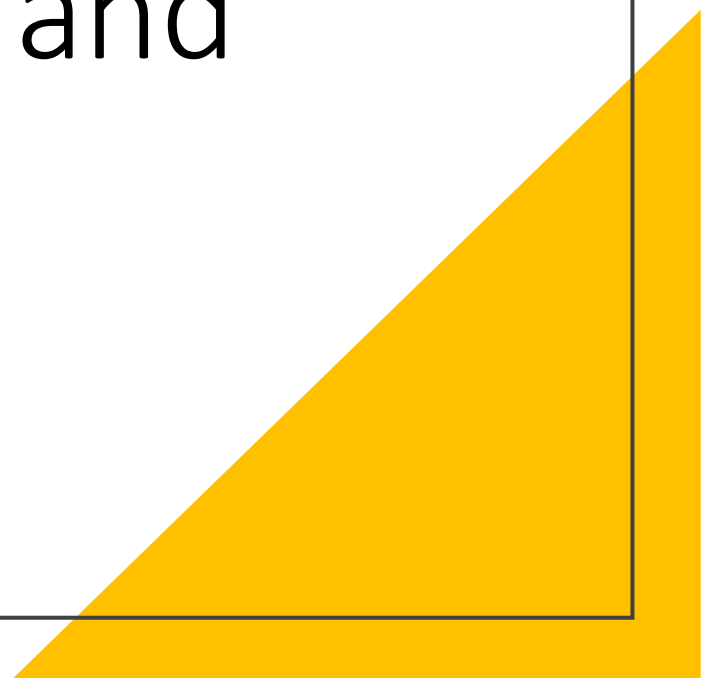


Public Health Nursing Guide to Emergency Preparedness and Response

Jessica Tracy, RN, MSN, REHS/RS

January 30, 2024

A large yellow triangle is positioned in the bottom right corner of the slide, pointing towards the top right.

THE PUBLIC HEALTH NURSE

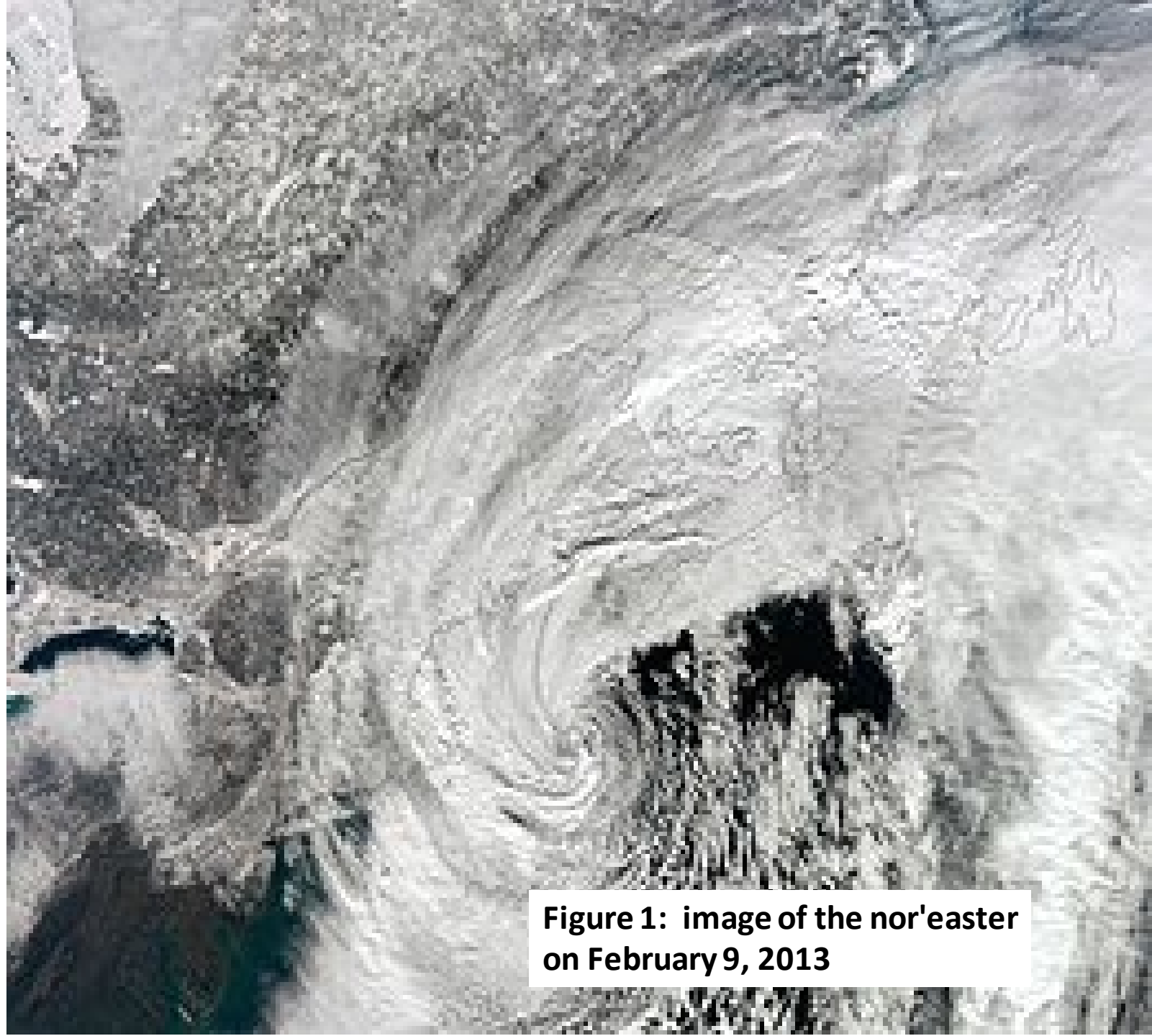


Objectives

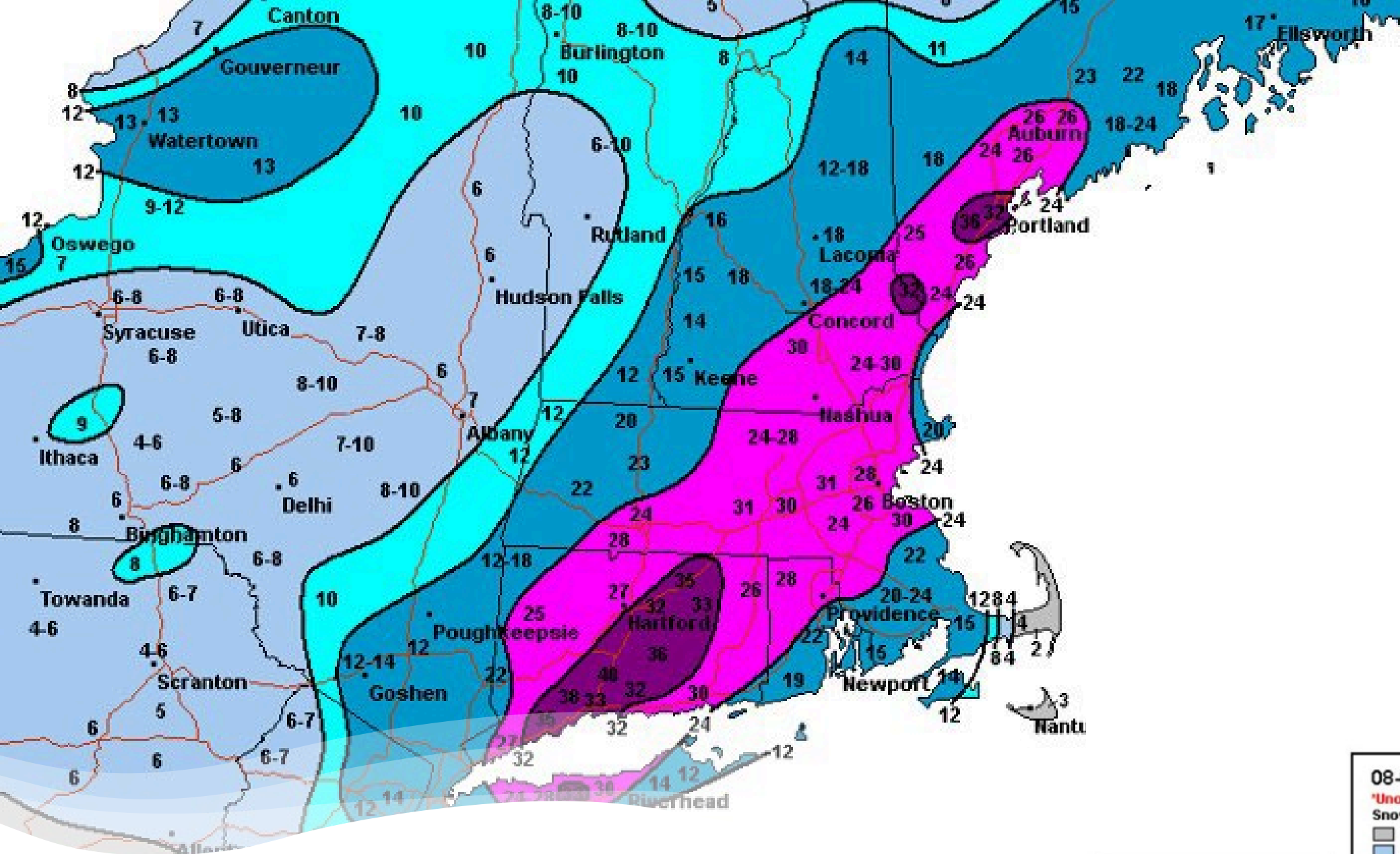
- Better understand your role as the public health nurse in emergency preparedness and response using the nursing process.
- Review tools, trainings and techniques to utilize for community emergency preparedness and response.
- Identify resources available for personal, professional and community emergency preparedness and response.
- Q & A

February 2013

Blizzard Nemo



**Figure 1: image of the nor'easter
on February 9, 2013**



08-09 February 2013 Blizzard

***Unofficial Storm Total Snow Accumulation**
Snow accumulation shown in black (inches)

- Trace to 4 inches of accumulation
- 4 to 8 inches of accumulation
- 8 to 12 inches of accumulation
- 12 to 24 inches of accumulation
- 24 to 32 inches of accumulation
- 32+ inches of accumulation

Data Analysis &
Graphic - Brandon Vincent
MWS Raleigh, NC
<http://www.weather.gov/raleigh>

“Planetary health problems, such as climate change, global migration, stressors of war, and a shortage of essential resources, are making it increasingly difficult for vulnerable populations to achieve a sense of well-being and good health, especially in times of disaster.

With an emphasis on primary prevention, PHNs promote community resilience by emphasizing preparedness activities (such as sharing natural disaster risk assessments, stockpiling necessities, establishing evacuation routes, etc.) to plan for the impact of disruptive events.”

Public Health Nursing

Scope and
Standards
of Practice

3rd Edition



Assess

- The PHN collects comprehensive data pertinent to the health status of populations.

Dx

- The PHN analyzes assessment data to determine actual or potential diagnoses, problems, and issues related to health and well-being.

Outcomes Identification

- The PHN develops plans that prescribe strategies to attain optimal health and well-being.



Implement

- The PHN implements identified plans.



Evaluation

- The PHN evaluates progress toward attainment of goals and outcomes.

Standards of Professional Performance

7. Ethics

8. Respectful & Equitable Practice

9. Communication

10. Collaboration

11. Leadership

12. Education

13. Evidence-based Practice & Research

14. Quality of Practice

15. Professional Practice Appraisal

16. Resource Utilization

17. Environmental Health, Planetary Health & Environmental Health

Phases of Disaster Linked to the Nursing Process

Disaster Phase	Definition	Assessment	Planning	Implementation	Evaluation
Mitigation	Prevent a disaster or emergency; Minimize vulnerability to effects of an event.	Assess a group of elderly citizens for their awareness about preventing heat stroke.	Develop community education plan to increase awareness about preventing heat stroke.	Conduct community education activities to increase awareness about preventing heat stroke.	Evaluate community education activities on preventing heat stroke.
Preparedness	Assure capacity to respond effectively to disasters and emergencies.	Assess the populations at risk for special needs during a disaster.	Develop plans to care for special needs populations during a disaster.	Conduct training, drills and exercises related to care of special-needs persons.	Evaluate plans for serving populations with special needs.
Response	Provide support to persons and Communities affected by disasters and emergencies.	Serve on a response team to determine the impact and specific health needs of hurricane survivors. Triage victims.	Develop plans to rotate staff on response teams to prevent stress and burnout among responders.	Deploy staff to shelters after a hurricane, in accordance with local and/or state emergency response plans.	Participate in after action reviews and/or debriefings to evaluate quality of health services provided and lessons learned.
Recovery	Restore systems to functional level.	Serve on team to assess community assets and potential for recovery from a recent flood.	Collaborate with partners and community leaders to plan long-term recovery priorities after a flood.	Participate in restoring community services after a flood.	Serve on team to evaluate long-term impact on persons displaced by a flood.

Figure 1: Schoenfisch, S. (2010). Challenges when sheltering displaced populations during natural & manmade disaster. <https://www.slideserve.com/livvy/challenges-when-sheltering-displaced-populations-during-natural-manmade-disasters-july-15-2010-webinar-sandra-sch>

Assessment

Vulnerable Populations:

- Older adults/elderly
- Children/Pregnant Women
- Communities of Color, Low Income, Migrant, English as 2nd Language
- Members of state or federally recognized Tribes or Tribal Nations
- People with disabilities
- People experiencing homelessness or housing instability
- People with pre-existing medical conditions

“Identifying at risk populations to assess the needs of the community in the event of an emergency will better prepare the community for disaster response and recovery”
(Demarco, R., & Healey-Walsh, J., (2016).

Assessment

- Threats
 - Climate Change
 - Natural Disasters & Weather
 - Increase in Vector-borne Disease
 - Mass Migration
 - Disease Agents & Toxins
 - COVID-19, Anthrax
 - Oil; Chemical, Biological, Radiological, Nuclear & Explosive Incidents
 - Mass Shootings



Impact of Climate Change on Human Health

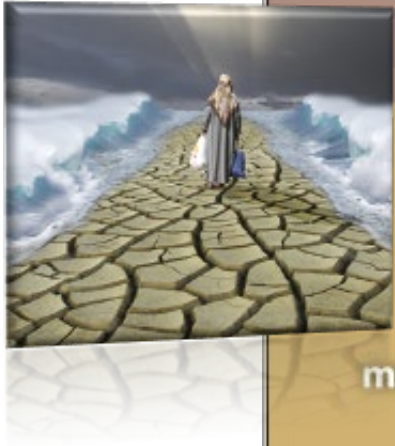
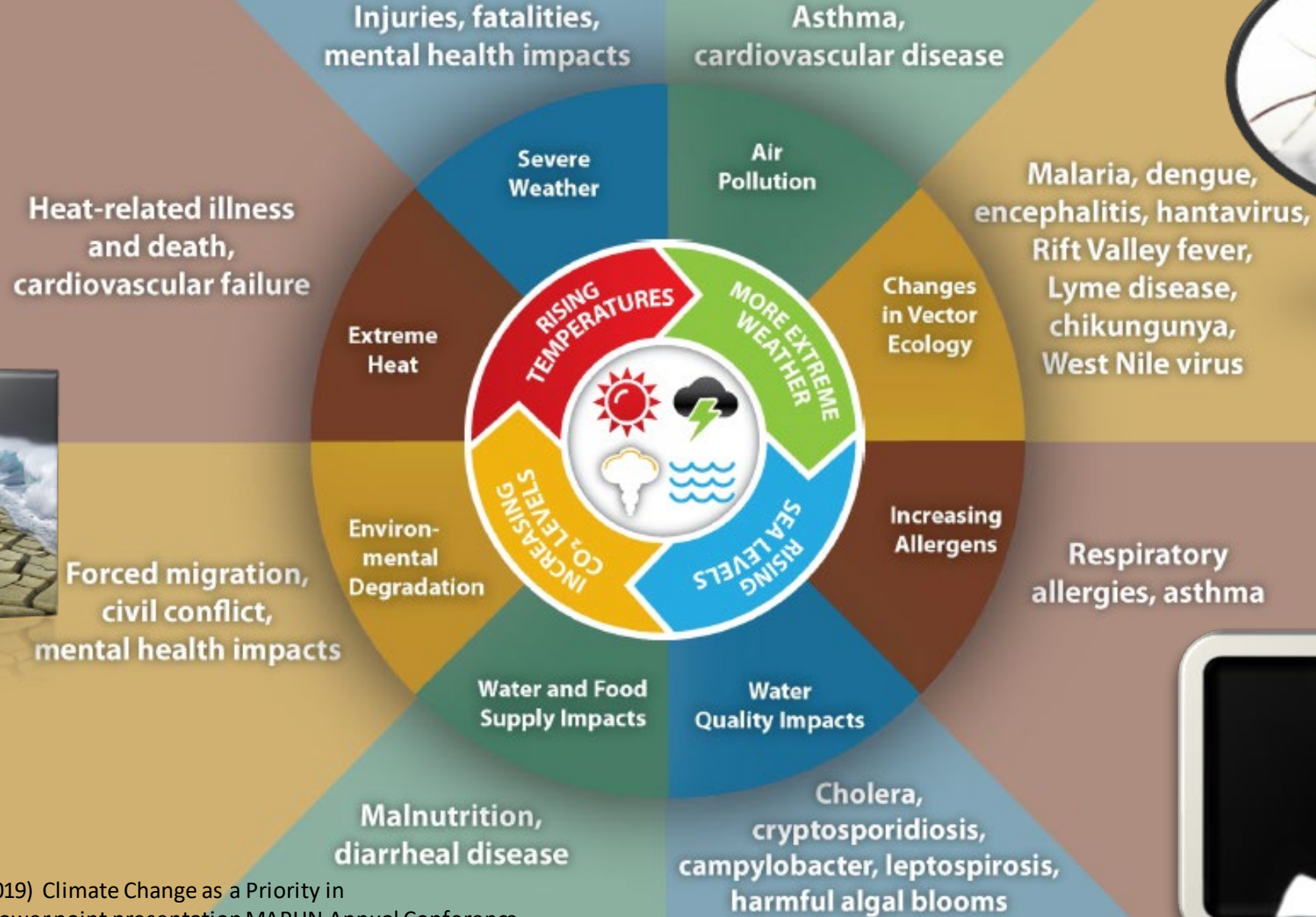
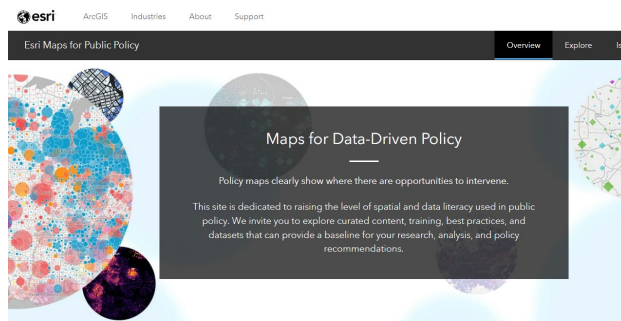
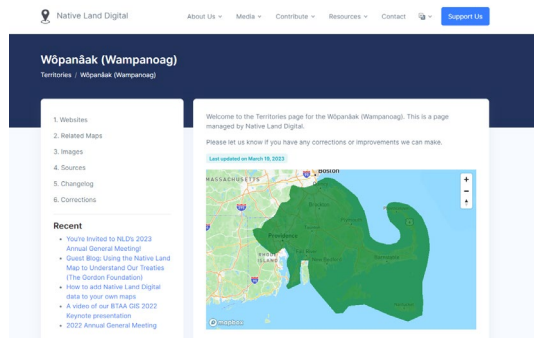


Figure 2: Chalupka, S. (2019) Climate Change as a Priority in Public Health Nursing: power point presentation MAPHN Annual Conference



Online Population Data Portals and Other Online Assessment Tools

Links to Data Portals

- ERSI : Maps for Data Driven Policy
<https://livingatlas.arcgis.com/policy/overview/>
- Native Land Digital: <https://native-land.ca/>
- CDC Public Health Gateway: Data & Benchmark:
<https://www.cdc.gov/publichealthgateway/cha/data.html#print>
- Population Health Information Tool
<https://www.mass.gov/orgs/population-health-information-tool>
- The Emergency Population Planning tool Preparedness Portal:
<https://www.mass.gov/info-details/system-logins-for-partners>

Strengths

- Transportation: Commuter Rail & Metro Bus. Dedham Counsel on Aging has shuttle for senior transportation for food or medical appointments.
- Recreation and Greenspace: 1 dog park, 5 public parks; Church, Memorial, Rustcroft, Condon & Paul. Charles River: boating activities on Charles River
- Community Events: Dedham Day, Flag Day Parade, Run for the Fallen
- Denominations: 5 faith-based organizations
- Local Ordinances: Town wide 25 MPH Speed Limit
- Food Access: Dedham Food Pantry, Meals-on-Wheels, Summer Farmers Market every Wednesday, 5 large groceries stores: Whole Foods, Star Market, Stop & Shop, Costco, BJ's

Opportunities

- Jobs & Diverse Economy and Shopping: 254 restaurants and retail, Dedham Mall, Dedham Square, Legacy Plaza
- School District: 4 Dedham Public Schools: Avery, Oakdale, Riverdale, Middle School & High School.
- 4 Private Schools: Ersaline, Noble & Greenough, Dedham Country Day School, Rashi School
- Childcare: 21 Childcare facilities, 12 Registered Camps
- Housing: 9,872 Households & Condos, 3,162 renter-occupied, 6 Public Housing Complexes, Federal housing 24 units of 1,2,3, 4 bedroom family housing, 461 Section 8 housing

Weaknesses

- Homes built before 1978: risk of lead paint, presence of asbestos, old plumbing of potable water sources (City Zip, 2019)
- Observation: Walkability- lack of sidewalks from homes, multiple sidewalks damaged with overgrown vegetation or trees.
- High Tax rate: Cost of living index 135.7 (high, U.S. average is 100) (City Zip, 2019); senior population disproportionately affected and often volunteer in Senior Tax Write off to compensate
- Counsel on Aging has limited space for activities. Single section of existing building which limits activities and social gatherings due to limited space

Threats

- Gun Shop: Permitted for East Dedham with-in 500 feet from local playground. Current point of contention in the community
- High visibility & concentration of alcohol & tobacco establishments in 10 sq. miles: 53 on premises alcohol vendors, 7 off premise alcohol vendors, 25 tobacco/e-cigarette retail outlets
- Greater Boston Metropolitan Area: Major highways including Rte. 1 & 95. "Ways" "Google GPS" Dedham becomes a "cut through" to Boston increasing traffic throughout Dedham. Increase car use risk of outdoor air pollution and safety accidents
- Aging population: Affordability of housing or single dwelling units
- Transfer Station: Closed due to E. Coli contamination into Charles River

Windshield Survey!



Figure 1.1 Strength, Weakness, Opportunity, Threats (SWOT) Analysis Town of Dedham 2019



Outcomes
Identification:
What did we find?
What needs to be
part of the plan?



A YouTube video shows Nellie Jurgy, a popular travel vlogger staying at a Hawaii house rented on Air B&B, disgustedly says,

“But I don’t even know where to go”

- <https://www.youtube.com/watch?v=m3QZDAowReM>

Nursing Diagnosis: Deficient Knowledge

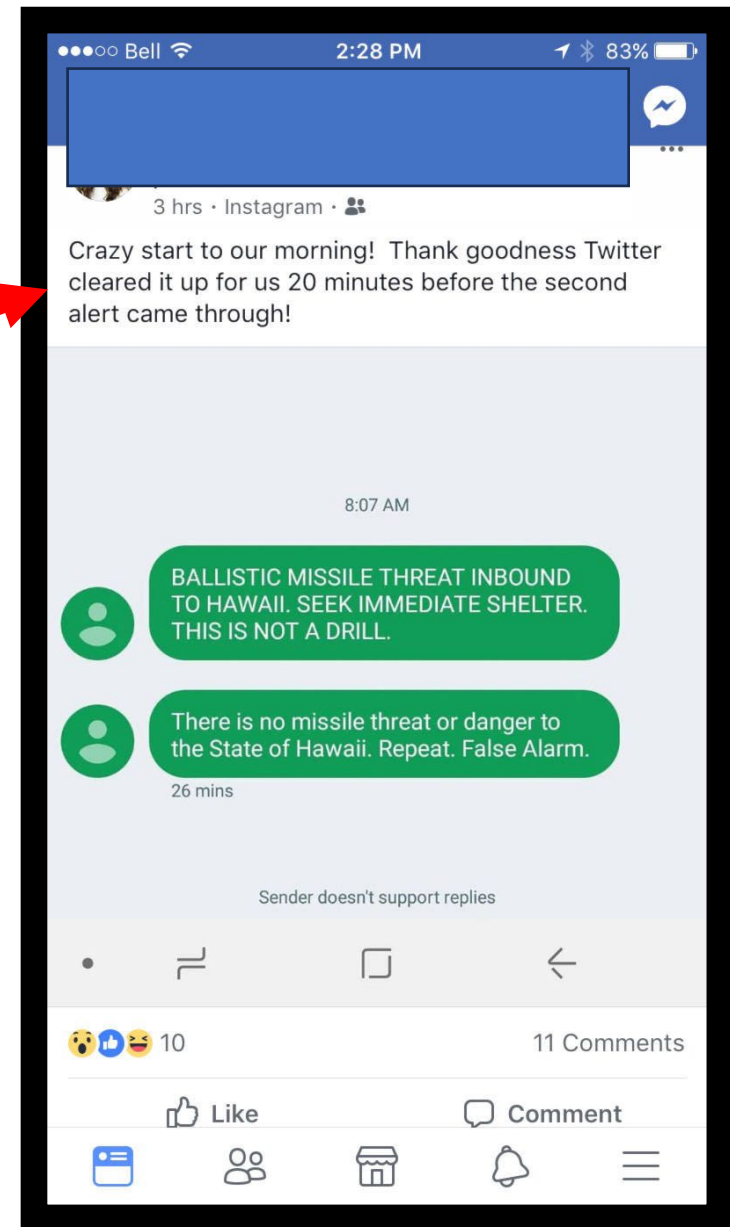
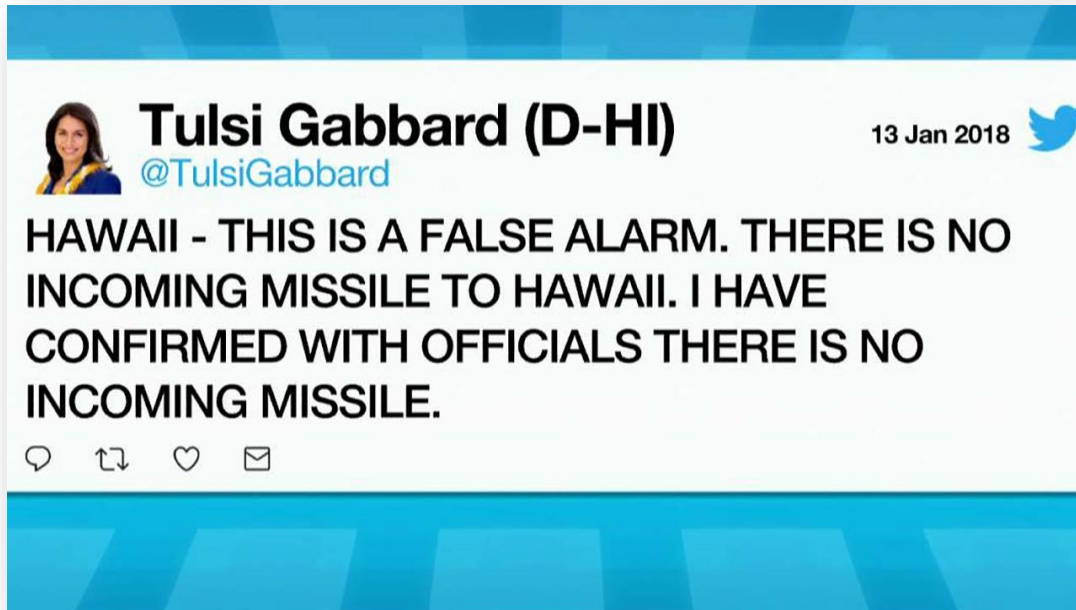
- Related to:
 - Inadequate knowledge of community evacuation plans and personal preparedness

Communication Considerations

- Language barriers
- Visual Impairments /Color Blind
- Wifi down/Translation apps
- Government Alert Systems
- ***Appropriate*** Community Postings!



Social Media



Massachusetts Health Promotion Clearinghouse

Our favorite four
letter “F” word!!!
FREE!

View All Products

16 items/page

Filter Search

☒ Emergency Preparedness

[Clear All](#)

AUDIENCE

- ☐ General audience (7)
- ☐ Older adults (1)
- ☐ Other (1)

FORMAT

- ☐ Booklet (4)
- ☐ Brochure (2)
- ☐ Other (1)
- ☐ Sheet (1)
- ☐ Wallet Card (1)

LANGUAGE

- ☐ English (8)
- ☐ English/Spanish (1)
- ☐ Portuguese (5)

Disaster Preparedness For Seniors By Seniors

Show Me Booklet - A Communication Tool for Emergency Shelters

Stay Aware. Be Prepared. 8.5" x 11" Brochure

Fred the Dog Activity Booklet

Stay Aware. Be Prepared.

Stay Aware. Be Prepared.

Emergency Ready Kit Checklist



2019. MAPHN Northeast Chapter PHNs teach Stop the Bleed
Train the Trainer to MAPHN Southeast Chapter PHNs

Building Resiliency in a Community

Human in Common: Upstander Training

Stop the Bleed

CPR/1st Aid

Narcan Training

ICS 100 & 200 NIMS 700

CERT: Train-the-Trainer

Large and Small Animal Sheltering: SMART

TRAIN Massachusetts

Building Skills & Resiliency

According to the National Alliance on Mental Health (2019) 20.1% of people experiencing homelessness in the U.S. have a serious mental health condition. More alarming is 60% of U.S. counties do not have a single practicing psychiatrist. (ANAMH, 2019).



Mental Health FIRST AID®
from NATIONAL COUNCIL FOR MENTAL WELLBEING®





“At night he likes to climb into my bed and steal my covers and pillow,” his owner wrote. “WallyGator has tried to bring my blankets with him into his pond!”- Joie Henney, owner he received approval from his doctor to use WallyGator as an emotional support animal after Henney didn’t want to go on medication for depression. Wally “licensed emotional support animal” in Pennsylvania. –New York Post, 2023



Go-Kits for Pets

- Ready.gov
- Understand laws
“comfort” animal versus
“service” animal
- Large/Small/Exotic
Animal Disaster
Preparedness Response
Considerations
- What is your shelter
design? Co-shelter?
Separate Areas?
Quarantine of Animals?

Service Animal



SERVICE ANIMALS & EMOTIONAL SUPPORT ANIMALS ARE NOT THE SAME

	SERVICE ANIMALS	EMOTIONAL SUPPORT ANIMALS
Covered by the ADA to bring into public establishments?	✓	✗
Allowed in apartments and condos with a "no pet" policy?	✓	✓
Specially trained?	✓	✗
Primary function to provide support through companionship?	✗	✓
Must be certified or registered?	✗	✗

ada Northeast ADA Center



If you have a question about disability contact the Northeast ADA Center at 1-800-949-4232.

The Northeast ADA Center is a member of the ADA National Network funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant number 90DPO088). We provide information, guidance, and training on implementation of all aspects of the ADA. Our center is located at the Yang-Tan Institute at Cornell University. Our staff consists of individuals with and without disabilities who have extensive experience in the disability field.

www.NortheastADA.org

Emotional Support Animal



Building Partnerships: EP Management

Emergency Operations Center
Health & Medical Coordinating Coalitions
(HMCC)

Region 1

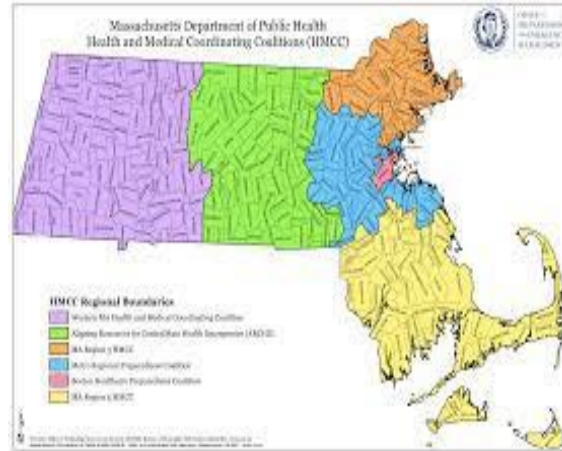
Region 2

Region 3

Region 4AB

Region 4C

Region 5



Sign up for State of Massachusetts Emergency Alert systems

Contact : dph.webeoc@massmail.state.ma.us to be registered to MDPH-WebEOC

HHAN: Health & Homeland Alert Networking System

*sign-up for alerts

alert.network@state.ma.us



Implementation

- Assessment Done
- Data Collected
- Disaster impending
- *Go-Time*



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This Photo by Unknown Author is licensed under CC BY

Location Prep

- Housing
- Food
- Trash
- Pets
- Personal Items



2021 Dedham Mass Vaccine Clinic set-up



1st Responder Covid-19 Vaccine Clinic

TOOL G
SHELTER SITUATION REPORT

The Paperwork

Daily Local Shelter Report

Report Date	
Report #	

Staffing				
Shelter Facility Name		City	State	ZIP
Shelter Manager Name		Cell Phone	Email Address	
Facility Coordinator Name		Cell Phone	Email Address	
Supervisor	Disaster Health Services	Disaster Mental Health	Facility Inspection Time	
1 st Shift				
2 nd Shift				
3 rd Shift				
Total # of Staff (Including Manager & Supervisors)		1 st Shift	2 nd Shift	3 rd Shift

Shelter Population			
	Time Reported	Name of Reporter	Shelter Count
Noon Report			
Midnight Report			

- <https://www.mass.gov/doc/massachusetts-statewide-mass-care-and-shelter-coordination-plan-local-shelter-toolkit/download>



2013 Blizzard Nemo Shelter Intake Station

People
Make the
shelter
work!

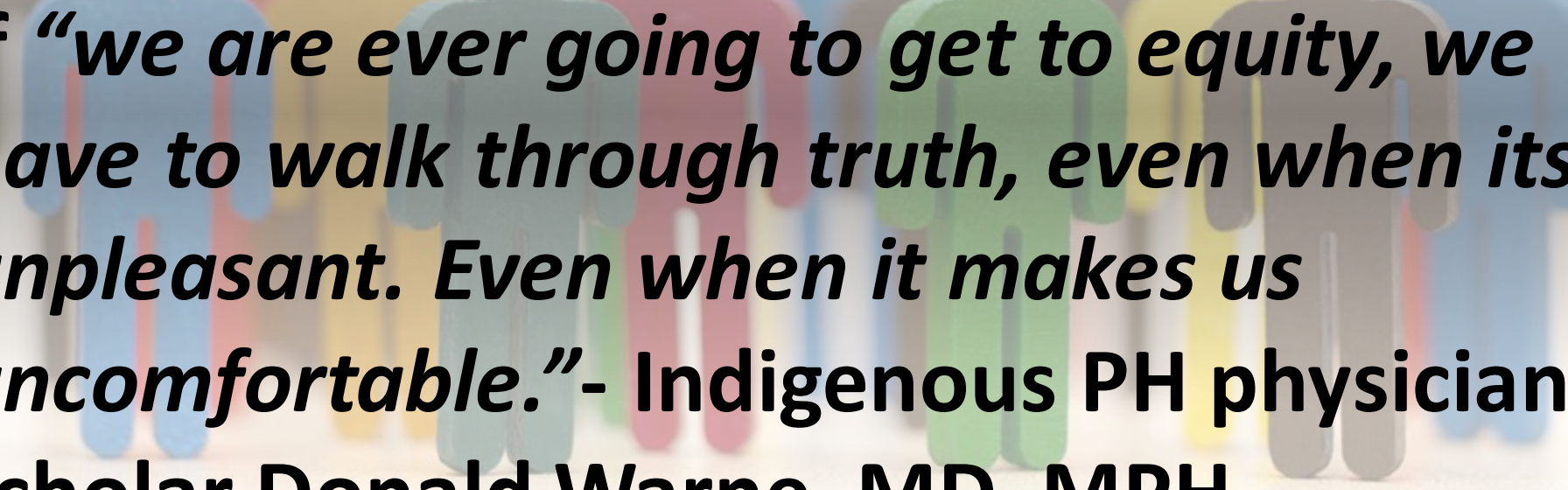


A close-up, slightly blurred photograph of a spiral-bound notebook. The notebook is open to a page with horizontal lines. A white pen with a silver tip is resting on the page. The spiral binding is visible on the left side. The background is a solid light color.

Recovery & Evaluation

- Staff/Volunteer Drills
- Debrief after an event

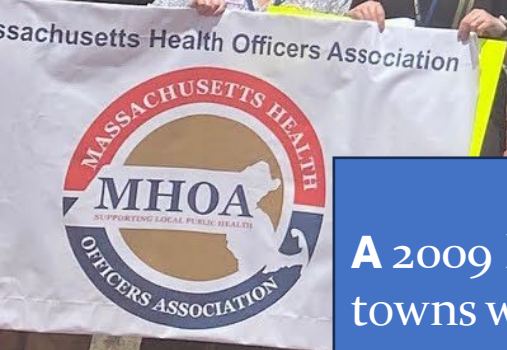
In everything we do, we do in Racial & Health Equity



If “we are ever going to get to equity, we have to walk through truth, even when its unpleasant. Even when it makes us uncomfortable.”- Indigenous PH physician & scholar Donald Warne, MD, MPH



ME



A 2009 Massachusetts Public Health Regionalization Project Status Report states 90% of the 101 towns with fewer than 5,000 residents had no public health nurse.

As of April 2022, 339 of the 351 cities and towns in Massachusetts have at least one (1) local PHN online using MAVEN.

QUESTIONS?



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