

# Public Health Essentials

## Public Health Fellows Mentor Handbook

Workforce Capacity Building  
in support of

## New York State's Public Health Corps



**Cornell University**  
Master of Public Health

# New York State Public Health Corps



## Background

Since emerging in late 2019, the SARS-CoV-2 virus has resulted in the COVID-19 global pandemic, infecting more than 150 million people, and killing close to 3.5 million people. New York State was heavily affected at the onset of the pandemic, but effective policy that promoted aggressive testing, contact tracing and surveillance, coupled with scaled-up clinical services and vaccination brought transmission under control, at least for now.

The loss lives related to the COVID-19 pandemic has shown New Yorkers that we can and must do more to reinforce our public health systems, and the health of every New Yorker in every community. Disparities in underlying health conditions and social determinants such as income, employment, and education, led to disproportionate impacts within many New York communities. The New York State Government is committed to build back, and build back better, learning from today, to make a stronger future.

## Overview

To support this, New York State is recruiting, capacitating, and deploying 1,000 full-time paid Public Health Fellows to support the county and state response to COVID-19 now, and to be engaged in more expansive public health programming and emergency preparedness now, and into the future.

Public Health Fellows come from many different backgrounds, including diverse academic, life, and work/service experiences. They are recruited from diverse backgrounds to have the ability and to work within their own communities, for a one-year fellowship period.

Public Health Fellows are placed at local health departments, other community partner organizations, as well as at the New York State Department of Health offices. Public Health Fellows take instruction and direction from a site supervisor, and work as a part of a public health team, connecting with members of the communities around them.

With capacity building, supervision, and mentoring, Public Health Fellows support COVID-19 education and awareness, increase demand for and acceptance of vaccination, and reinforce COVID-19 prevention practices, inclusive of contact tracing, quarantine and isolation support, and/or connection with clinical and support services. Public Health Fellows also work to help communities overcome health access barriers related to the social and structural determinants of health.

# Public Health Essentials Certificate

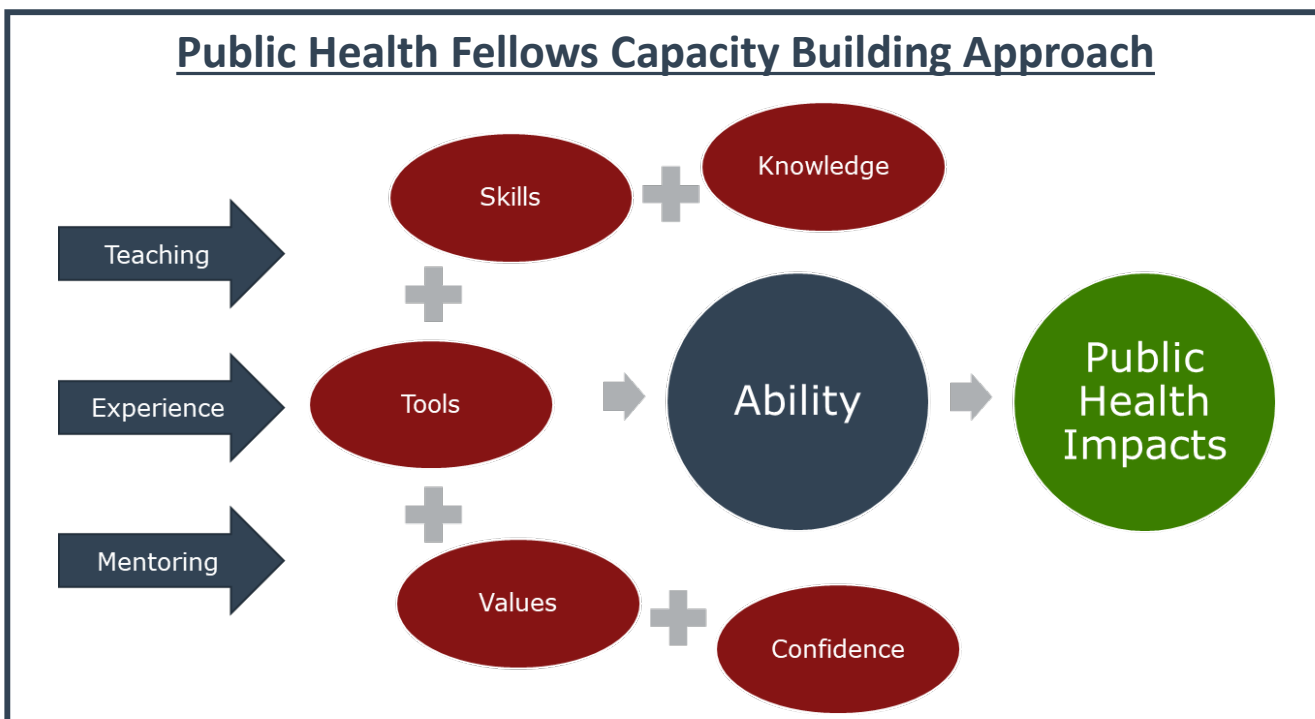
## Capacity Building for Impacts

To equip Public Health Fellows for their applied and engaged public health work, Cornell University has partners with New York State to deliver 'just in time' learning to each Fellow.

The **Public Health Essentials** curriculum is an 80-hour self-paced web-based facilitated project-based curriculum focused on equipping learners with the foundations of public health so they can better serve their communities. The curriculum is designed to orient and equip Fellows without formal public health education, and to re-activate excitement and New York State focus among Fellows with formal public health training.

Our capacity building approach is grounded in Adult Learning Theory which suggests that adults learn best when learning: is self-directed, adds to their experiences, is practical, and is focused on problem-solving. As such, the **Public Health Essentials** certificate program incorporates a combination of asynchronous online distance learning and applied learning activities delivered and supported by Cornell instructors, peer-to-peer course discussions and video conferencing facilitated by Cornell facilitators, and in-person meetings with peers and mentors.

Delivered in five mini-courses, and 14 modules, the **Public Health Essentials** curriculum helps learners explore the public health approach and methods; the demographics and health status of people living in their county; and the resources they can build upon to close health-related gaps. With mentoring, learners complete project work that is directly applicable to their county, including county resource guides, county demographic and health profiles, statements of need/opportunity, and outreach and communication plans to better engage with underserved communities. This practice equips learners to engage with higher-risk, vulnerable populations community members; collaborate with existing programs; work with community gatekeepers to understand community perceptions and barriers; set up 'pop-up' education sessions; generate interest in and acceptance of public health initiatives; and gather and report key data to the county and state.



# Use of This Guide



## Public Health Fellows' Learning Journey

The **Public Health Essentials** curriculum is delivered in five mini-course that Public Health Fellows take in succession.

1. **New York State Public Health COVID-19 Readiness Training**
2. **Public Health Foundations**
3. **Assessing Community Health and Resources**
4. **Supporting Public Health Behaviors**
5. **Public Health Preparedness**

By the time a Public Health Fellow starts their placement within a community, they should have completed Course 1. Over the next three months of their Fellowship, they should complete the other four courses.

→ To help Public Health Fellows stay on pace with their learning, and be able to excel in their work, we encourage you to help each Fellow find, schedule, and **allocate five-hours of time each week** to their learning.

Part of our capacity building approach is to help learners routinely and regularly apply their learning to real-life scenarios and projects. With each learning module, Fellows will be pushed to apply their learning to something they observe or measure or interpret related to their community. This learning is documented in series of assignments that Fellows complete. Cornell instructors and facilitators will provide each Fellow with input to help strengthen the submission, but we know that the best feedback, the best growth, and the best potential for impact will come from local feedback from mentors, and/or discussion with local peers.

→ To help Public Health Fellows apply and integrate their learning, and to help bring potential benefit to your community, we encourage you to **have discussions with Fellows about what they are learning, what they are developing, and what they might offer**. This might be in the form of 1:1 meetings with you, chats over coffee, or even discussions or presentations at team meetings. Any dialogue and any input will benefit many!

To help you feel informed, and to equip you to engage with Public Health Fellows, this guide presents a summary of key learning outcomes and applied activities that each Fellow will complete within each course and module. There is one summary page per module, or per week of learning. You can use this to follow along with a Fellow, and know what to ask them, and share with them, when.



# Course 0 – NYS Public Health COVID-19 Readiness Training

## Course Overview

This course serves as a foundation for someone interested in public health work. The course introduces learners to the foundational elements of public health (what public health is, and how to be a part of it), and by using COVID-19 as a case example, the course aims to help learners feel prepared to "hit the ground running" as they interview for or get started in a position that supports community health. As a part of this, the course helps learners identify how the skills and experience they already have apply in the field of public health, and they are introduced to current, evidence-based public health resources so they are at their fingertips.

Via four modules, learners explore what public health is and how public health initiatives are developed and introduced into communities. Learners then take a closer look at COVID-19 and delve into the various tools for prevention and response, including testing, advisories and mandates, contact tracing, and vaccination. Finally, learners are introduced to what influences human behaviors so that they feel equipped to help others engage in COVID-19 prevention activities.

At the end of the course, learners also receive a checklist of other trainings that many groups supporting New York State's COVID-19 response expect employees to take.

## This course has four modules:

- Module 1: Public Health Initiatives
- Module 2: COVID-19
- Module 3: Promote COVID-19 Vaccination
- Module 4: Broaden Your Influence

## Overall Learning Outcomes

Via this course, learners will:

- Describe the goals of public health efforts and how public health happens in the community
- Examine the science of COVID-19 transmission and prevention to better support community prevention efforts
- Explore community COVID-19 vaccination efforts, and lessons learned from other campaigns, to generate ideas to increase local vaccination rates
- Discover strategies to influence others, combat misinformation, and encourage healthy outcomes

## Module Overview

In this module, learners connect the goals of public health with its history and begin to envision their role in shaping its future. More specifically, learners appreciate how they are already a part of public health, and how every day they have the potential to improve lives. Learners explore the definition of public health, and what the mission of public health work via reviewing how the field of public health evolved, and what the future of public health might look like.

## Specific Learning Objectives

After completing this module, learners will be able to:

- Define what public health is
- Describe what the 4 Ps of public health are
- Explain how public health prevention happens
- Describe how the field public health has evolved over time
- Delineate how public health methods of the past are still used today
- Explain how public health happens, including what the core functions and essential services of public health are
- Describe how various levels of government influence public health
- Provide examples of the various professions and organizations that contribute to public health

## Applied Learning Activities

To deepen and demonstrate capacity growth, learners:

- Are oriented to, and then explore federal, state, and county public health organizations, and their websites to identify and describe respective roles and responsibilities
- Review and take note of local community based organizations who are linked to public health, and summarize the services they provide
- Develop a personal vision of how they can and will become a key part of the vast field of public health

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Module Overview

COVID-19 is new and it has affected many Americans as well as many people around the world. The impact of COVID-19 has been significant. COVID-19 has infected more than 100 million people globally, including nearly one in every ten Americans. COVID-19 is currently the third leading cause of death in the U.S. For perspective, more Americans died from COVID-19 in the past year than died in all of World War II.

The good news is that we really do have the tools we need to stop COVID-19 in its tracks. But it means that we all need to work on this together because every community is a little bit different in how they access or take action on information.

In this module, learners build their knowledge about COVID-19: what it is, how it spreads, and what we know about it. Learners then focus on the multiple layers of COVID-19 prevention efforts, and appreciate how they can become involved in supporting these efforts. Learners should be able to see how their experience and perspective makes them a perfect candidate to help support public health efforts in their community.

## Specific Learning Objectives

After completing this module, learners will be able to:

- Define what COVID-19 and SARS-CoV-2 are
- Explain how COVID-19 spreads
- Describe the range of symptoms someone may experience when they have COVID-19
- Explain why some people are more affected by COVID-19 than others
- Describe when, why, and how people should get tested for COVID-19
- Describe health disparities, and the impact of age and race on disease outcomes
- Delineate multiple strategies to prevent or reduce the spread of COVID-19, including the use of mandates and advisories, testing resources, quarantine and isolation, contact tracing

## Applied Learning Activities

To deepen and demonstrate capacity growth, learners:

- Are linked to, and review, CDC's COVID-19 web resources related to COVID-19 etiology, spread, prevention, impacts
- Are linked to, and review, New York State's COVID-19 web resources related to COVID-19 prevention, travel advisories, mask mandates, testing services

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Module Overview

One major reason the emergence of SARS-CoV-2 created a global pandemic is because it was new. Humans didn't have immunity, so everyone was susceptible. It spread from person to person and overwhelmed nations worldwide.

History shows us that the way to prevent the spread of diseases like COVID-19 is by boosting immunity, and vaccines help us do this. Soon after the discovery of SARS-CoV-2, scientists jumped into action to develop vaccines to prevent COVID-19. Now that vaccines are available, we need to support prevention through vaccination.

In this module, learners explore information about COVID-19 vaccines, consider why vaccination is so important to addressing and stopping COVID-19, review strategies that can help others access their COVID-19 vaccine, and appreciate how they can play a role in boosting community immunity against COVID-19.

## Specific Learning Objectives

After completing this module, learners will be able to:

- Explain how vaccines and vaccination work, for personal health and community health
- Describe the similarities and differences between the vaccines used in New York
- Explain why, in some cases, people need to get vaccinated twice
- Describe how the COVID-19 vaccinations were developed, and how they became available for use so quickly
- Answer simple questions about the COVID-19 vaccines, accurately
- Acknowledge vaccine hesitancy, and help support others to overcome hesitancy to get vaccinated

## Applied Learning Activities

To deepen and demonstrate capacity growth, learners:

- Are linked to, and review, the FDA's and the CDC's COVID-19 web resources related to the COVID-19 vaccinations that are in use in the U.S.
- Are linked to, and review, where in New York people can get vaccinated against COVID-19, and how to make appointments
- Consider strategies that have supported effective vaccinations efforts in the past, to consider adoption or use of similar strategies, now, to support COVID-19 vaccination

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.



## Overview

Have you ever tried to encourage a friend to wear a mask or to convince someone you love to make a healthier choice? If you have tried and failed, you are not alone. That is because people are complex. The behaviors we engage in, and the factors that lead to them, are complicated.

A person will behave in a certain way only when they want to — when they have intent. That intent is influenced by their own attitudes and beliefs, as well as the attitudes and beliefs of people around them. As a parent, child, friend, or peer, you may have the ability to influence some of these attitudes and beliefs and help someone engage in a prevention behavior. This module focuses on that, and helps learners identify ways to help people consider or try a new behavior — like getting the COVID-19 vaccine!

## Specific Learning Objectives

After completing this module, learners will be able to:

- Explain why humans behave the way they do
- Describe why personal and community behavior change is so hard
- Propose strategies to support behavior change, including:
  - Acknowledging and addressing misinformation and disinformation
  - Listening, and building trust
  - Modeling the way
  - Being empathetic, and showing care

## Applied Activities

To deepen and demonstrate capacity growth, learners:

- Complete a course-level quiz
- Document completion of seven trainings required of those working with many New York State COVID-19 response teams:
  - NYSDOH Module 1: Background on COVID-19 Vaccines
  - NYSDOH Module 2: COVID-19 Vaccine Considerations, Patient Screening, Education, and Consent
  - NYSDOH Module 3: COVID-19 Vaccine Administration, Anaphylaxis, and Post-Vaccination Information
  - NYSDOH Module 4: COVID-19 Vaccine Shipping, Storage, and Handling
  - NYSDOH COVID-19 POD Operations Training for POD Staff
  - Privacy and Security of Health Information in New York State
  - COVID-19 Contact Tracing (offered by Johns Hopkins University)

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.



# Course 1 – Public Health Foundations

## Overview

Understanding of public health principles and practices enable individuals to become professional, and assist in the goal of controlling and managing the effects of disability and disease in communities. Awareness of the conditions that cause disease, a growing body of scientific research, and the capacity to implement public health interventions have allowed societies to launch wide-scale public health efforts.

This course aims to help learners develop essential knowledge and skills, helping them be equipped to serve in the rollout of important community health efforts, as a member of a professional public health workforce. Specifically, learners come to understand what health and public health are, and build their ability to identify public health challenges and initiatives. To do this, learners explore different theories or models that help one consider and examine public health needs and opportunities, and then use those lenses to investigate and interpret information about community health. This includes building learners' awareness of the disparities and inequities that contribute to poor health outcomes, so that they might use that to inform the prevention or access interventions that can help improve community health.

## This course has three modules:

- Module 1: Public Health Initiatives
- Module 2: Models for Considering the Public's Health
- Module 3: Connect Values That Drive Public Health Interventions

## Overall Learning Outcomes

Via this course, learners will:

- Describe public health and the evolution of its role in community health
- Consider models such as the hierarch of needs, the socio-ecological model, and the social determinants of health, in informing selection of public health interventions
- Identify key public health issues and needs in the U.S. and New York State, and explain the influencing determinants of health
- Predict and communicate potential barriers to achieving individual and community health
- Explore the respective roles and responsibilities of county, city, state, and national public health bodies

## Overview

What is health? Why do we need public health?

In this module, learners explore some of the most pressing health issues of our time, including the main links to disability and early death, and consider why public health is an important field of work. Learners examine definitions, and consider the various areas where one might focus on to improve a person or a community's health.

To help reinforce knowledge, learners develop a presentation that they might give to others to help them understand what public health is, and why it is so important.

## Specific Learning Objectives

After completing this module, learners will be able to:

- Define health and public health
- Describe what the mission and goals of public health are
- Explain the role of public health leaders
- Describe priority public health opportunities in the U.S. and New York State, including leading causes of morbidity and mortality
- Help others understand, and appreciate how to prevent priority public health areas such as:
  - Heart Disease, Stroke, Cancer, Diabetes, Accidents, Unintentional Injuries, Chronic Lower Respiratory Diseases, Alcohol, Drug Use, Addiction

## Applied Activities

To deepen and demonstrate capacity growth, learners:

- Are orientated to the CDC and the APHA, as key resources for public health information
- Review summary population morbidity and mortality data for the U.S., and for NYS
- Are orientated to CDC and NYS educational resources and prevention/ treatment/ care services related to:
  - Heart Disease, Stroke, Cancer, Diabetes, Accidents, Unintentional Injuries, Chronic Lower Respiratory Diseases, Alcohol, Drug Use, Addiction
- Review CDC's free Public Health 101 resources
- Outline a presentation to teach others about public health

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Overview

At its core, public health focuses on prevention and health promotion, affecting full populations. Now that learners have become acquainted with this, this module will give learners the tools needed to explore public health needs via different lenses. In analyzing basic human needs, and identifying factors that influence health, learners discover how public health affects all of us, and what we can do to reduce harm and improve health.

Public health also asks that we focus on equity and social justice. This is another lens through which to consider public health. By identifying which populations have the greatest needs or are most limited in achieving health, we may focus efforts and interventions there. Learners appreciate that as a public health practitioner, their eyes can become trained to see community resources and assets, to notice when there are gaps or opportunities for support, and how to play a role in that.

## Specific Learning Objectives

After completing this module, learners will be able to:

- Explain the significance of social justice and equity as drivers of public health interventions
- Describe and apply various models that can help us understand what contributes to public health issues, to help envision ways to address and improve public health, including:
  - The Hierarchy of Needs (Maslow's Hierarchy of Needs)
  - The Social-Ecological Model (aka the Bio-socio-ecological or BSE Model)
  - The Social Determinants of Health (SDOH)
- Explain how social and ecological factors influenced the impacts of COVID-19 on people and communities
- Discuss considerations of privilege and power on public health access and outcomes
- Review of the five social determinants, and how they have impacts on health

## Applied Activities

To deepen and demonstrate capacity growth, learners:

- Use the “Public Health Hierarchy” to consider how to improve access and adherence to diabetes control treatments
- Use the Social-Ecological Model to consider how various layers of influence support or inhibit access to services, and overall health – in general, and in the learner’s community
- Explore the Social Determinants of Health to consider public health priorities (Health People 2030), and identify interventions that can improve outcomes
- Use a SWOT analysis to understand a community, and propose a public health intervention that builds on community strengths

We encourage you to ask your Fellow to share what they’ve learned and what they’ve developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Overview

Prevention of disease is the ultimate goal in public health. But how are interventions focused to achieve this goal? And how do we consider the address the disparities of health outcomes among different population groups? Successful interventions rest on a perceptive view into a community that includes the obstacles to social justice and equity in that community.

In this module, learners consider the values that are at the core of public health: equity and social justice, and come to appreciate how important it is to consider and engage with groups of people who are underserved or who have greater needs, perhaps based on historical oppression including but not limited to racism, sexism, ageism, ableism, homophobia, transphobia, and weight stigma.

With this knowledge, learners are asked to draw connections to effective public health interventions, including a focus on "population as a whole:" how to prevent disease, promote health, and prolong life for *everyone*.

## Specific Learning Objectives

After completing this module, learners will be able to:

- Describe what Health Equity and Social Justice mean
- Explain why prevention, and the determinants of health are so important in public health
- Describe the Public Health Prevention Pyramid, and provide examples of:
  - Primary prevention interventions
  - Secondary prevention interventions
  - Tertiary prevention Interventions

## Applied Activities

To deepen and demonstrate capacity growth, learners:

- Explore how public health leaders describe health equity
- Review of some of the most effective public health prevention interventions of our lifetime
- Develop a public health intervention idea that could help to improve health equity and social justice in a community
- Research local organizations that they could partner with on public health and health equity projects

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.



# Course 2 – Assessing Community Health & Resources

## Overview

Data that you can use to inform public health interventions are everywhere.

In this course, learners will build skills to consider public health data thoughtfully, draw reasoned inferences from it, and recommend data-based actions with confidence. Learners will be guided to explore some trusted and reliable sources of public health data, and will be coached to cultivate habits to help consider the validity or trustworthiness of data. With those skills, learners will compile global, U.S., and local data, and from there, learners will draw inferences to answer questions about their own community's health, well-being, and the disparities related to that.

Based on the compiled data, and learners will identify factors in their community that contribute to positive or negative public health outcomes, consider and identify community-based organizations and services that can help address some of these needs, and then offer recommendations that could help improve the health of the community in which they live or work.

## This unit has three modules:

- Module 1: Obtain and interpret public health data
- Module 2: Explore and analyze community public health data
- Module 3: Connect public health resources

## Overall Learning Outcomes

Via this course, learners will:

- Identify reliable data sources
- Obtain and interpret public health data
- Create and analyze a community demographics and health profile
- Identify population health disparities
- Research community resources to address public health needs

## Overview

The goals of public health are to prevent disease and injury, to promote health, and to prolong life. And, we strive to achieve equity and justice. But where do we even start? How do public health workers know what to focus on, or who to work with? Well, the answer is: data and numbers.

In public health, data or numbers are power. Data can be used to show you where there are opportunities to meet needs or to close gaps. Data can show you where there are disparities. This guides action. The cool thing is, there are a lot of data out there, already, that you can use to understand trends, gaps, and opportunities around you.

In today's internet-steeped culture, there is no shortage of information and data. What's crucial is determining reliable sources of information then accurately interpreting the data. In this module, learners explore several reputable sites, and learn how to approach the data and draw inferences. Learners examine both global and local contexts in order to identify resources you might connect to needs in their community.

## Specific Learning Objectives

After completing this module, learners will be able to:

- Describe how and why data are used in public health
- Show comfort in reading and interpret public health numbers, figures, charts, including:
  - Percentages, proportions, frequencies, rates
  - Histograms, bar charts, trend lines
- Consider where to access strong public health data, including:
  - The Institute for Health Metrics and Evaluation/ [HealthData.org](https://www.healthdata.org)
  - Our World in Data/ [OurWorldInData.org](https://ourworldindata.org)

## Applied Activities

To deepen and demonstrate capacity growth, learners:

- Review public health data sources to identify leading causes of death and disability in a region
- Interpret data to make observations
- Compare and contrast data to prioritize focal areas
- Develop a fact-based/data-based argument around why to address a public health need

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Overview

Now that learners have been introduced to seeking out, comparing, and interpreting global public health data, this module focuses on applying those skills to state and community public health data.

In this module, learners look at available public health data for their own state and county, and develop a data table to document, compare, and contrast population demographics, health needs, and behavioral factors. Learners then interpret the data, and provide observations and recommendations related to general public health outcomes, and related to COVID-19.

## Specific Learning Objectives

**After completing this module, learners will be able to:**

- Describe how public health trends and needs are tracked
- Access strong public health data from reliable sources, including:
  - U.S. CDC COVID Data Tracker/ [covid.cdc.gov/covid-data-tracker](https://covid.cdc.gov/covid-data-tracker)
  - U.S. Census / [census.gov](https://www.census.gov)
  - County Health Rankings / [CountyHealthRankings.org](https://www.countyhealthrankings.org)
- Explore and interpret public health data
- Describe the comparative ‘state of health’ in their state or county of interest
- Identify disparities in community health outcomes, and the factors that influence that

## Applied Activities

**To deepen and demonstrate capacity growth, learners:**

- Review public health data sources to identify leading causes of death and disability in a region
- Access and compile public health data from multiple sites to develop a state and county public health data profile
- Examine and interpret data to describe how one’s county’s demographics, health outcomes, and COVID-19 impacts are similar or different to the state’s
- Envision and propose public health interventions that might address local public health needs

We encourage you to ask your Fellow to share what they’ve learned and what they’ve developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.



## Overview

In this module, learners are introduced to and explore the roles and responsibilities of public health agencies at the federal, state, county, and local levels. As a part of this, learners use COVID-19 as a case study, to examine who did what, and why, and to identify available community resources that did or could support a collective and inclusive response to COVID-19, and other public health priorities. Based on this examination, learners create an action plan to support community health amidst a public health crisis.

## Specific Learning Objectives

**After completing this module, learners will be able to:**

- Describe the 3 core functions and 10 essential services of public health
- Explain the organization of public health at the federal and state levels
- Describe the various roles and responsibilities of agencies in public health, including:
  - What DHHS is and does, and what its agencies are
  - What CDC does
  - What State Public Health Departments do
  - What County Public Health Departments do
  - How NGOs play a key role in Public Health

## Applied Activities

**To deepen and demonstrate capacity growth, learners:**

- Develop a resource directory of federal and state agencies linked to public health
- Discuss the role(s) that public health resources at various levels took during the COVID-19 response
- Identify local resources who can be allies in a public health response
- Summarize community demographics and public health gaps and disparities
- Identify potential opportunities and barriers you see in closing those gaps
- Develop a memo that summarizes observations, and proposes solutions

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.



# Course 3 – Supporting Public Health Behaviors

## Overview

Practicing public health involves study, data collection and analysis, and policy advocacy at international, national, and local levels. It also involves working directly with people to advocate for and support the behaviors that will prevent disease, promote health, and prolong life among individuals and the population as a whole. Those working to support and advance public health must become adept at working directly with people to be effective.

Through this course, learners enhance their communication skills and their ability to facilitate behavior change by studying behavior principles and practicing important skills that enable effective public health communication and engagement. Learners begin by examining two important behavior models and considering several different factors that influence behaviors. Learners then review key components of effective public health communication, including audience analysis and accessible messaging. Finally, learners explore and practice critical strategies for developing trust and meaningful connections with people of other cultures and social identities.

## This unit has three modules:

- Module 1: Describe Strategies That Influence Behavior Change
- Module 2: Determine Key Parameters of Effective Public Health Communication
- Module 3: Define Strategy to Build Trust and Community Relations

## Overall Learning Outcomes

**After completing this module, learners will be able to:**

- Describe strategies that influence behavior change
- Apply behavior change theory to identify factors and define strategies for action
- Determine the key parameters of effective public health communication
- Complete an audience analysis and define public health communication goals
- Develop a public health message and approach to meet a communication goal
- Discuss evidence-based strategies to overcome COVID-19 vaccine hesitancy
- Define a strategy to build trust and community relations
- Apply expanded communication skills, including active listening and the LARA method

## Overview

Individual health, and public health, are at least partially influenced by and individual's behaviors, but the complexity of humans and human behavior makes change difficult. That means the job of a public health professional can also be challenging.

Solutions to health issues often focus on individual behaviors, but individual behavior change can be hard. This can lead to frustration for the individual, care providers, and public health officials because behavior-based solutions may not lead to long-lasting change. With the right understanding of why people behave as they do, public health leaders can better support changes that enable health and well-being.

In this module, learners explore two behavior change models that illustrate the complexity of human behavior and why it can be so difficult to change. Learners consider the many factors that affect human behaviors and practice identifying such factors in a series of case studies. Learners then propose a hypothetical public health initiative that could support behavior change to address a community public health need.

## Specific Learning Objectives

**After completing this module, learners will be able to:**

- Explain why humans behave the way we do, and how that impacts our health
- Describe the Integrated Model of Behavior Prediction, as a way to consider an plan behavior change interventions
- Describe how factors from multiple layers around us influence what humans do
- Discuss how humans consider the relative costs and benefits before taking action to improve health
- Consider social norms, and how communities can support or limit action
- Discuss racism, and the impacts it has on health and health outcomes
- Review strategies that support behavior change

## Applied Activities

**To deepen and demonstrate capacity growth, learners:**

- Apply behavior change theory to multiple case studies to identify factors that may help or hinder a person from taking action, and to define strategies for action

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Overview

Communication can help identify solutions to many work and life problems. We know, however, that not all communication, nor all communicators, are created equal. The challenge is not just to send a message, but to create and share messages that others understand, believe, and respond to positively.

In this module, learners examine several important factors to consider when determining what message to share, with whom, when, and how. Learners practice audience identification and analysis, consider how to make a message understandable, and determine how to best reach the primary audience. In this module, learners also learn how to develop SMART goals and communication objectives to help focus a message.

## Specific Learning Objectives

**After completing this module, learners will be able to:**

- Describe the key tenets of public health communication
- Describe what makes public health communication effective, or not
- Explain steps to take to plan effective communication, including:
  - Audience analysis
  - Communication goal/desired outcome
- Create SMART goals and objectives
- Describe needs related to health literacy and numeracy
- Explore how to improve readability

## Applied Activities

**To deepen and demonstrate capacity growth, learners:**

- Complete an audience analysis to inform development of an effective public health campaign
- Define public health communication goals to help inform development of an effective public health campaign
- Develop a public health message and approach to meet a communication goal, while considering the target audience
- Discuss evidence-based strategies to overcome COVID-19 vaccine hesitancy

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Overview

The foundation of success in advocating for public health at both institutional and individual levels is trust. People, groups of focus, and agencies and governments will only listen and be persuaded if they trust the messenger.

In this module, learners review several components to building trust and relationships. Learners review the basic building blocks of establishing trust, and examine how social identities affect how people perceive and interact with the world — including communications and messages. To support this, learners consider and practice using an important tool in facilitating dialogues that lead to connections and shared understandings between people, whether they hold similar outlooks or are diametrically opposed in their viewpoints.

## Specific Learning Objectives

**After completing this module, learners will be able to:**

- Describe various roles and responsibilities of public health workers, and the skills that support that
- Explain strategies that can help building trust with communities
- Discuss some limits on trust, and identify factors to help re-build trust
- Describe how they are working to build cultural awareness and competence
- Explain social identities, and how these influence trust building and cultural competence
- Apply communication skills to shift from debate to discussion and dialogue, by using the LARA method

## Applied Activities

**To deepen and demonstrate capacity growth, learners:**

- Role-play scenarios to identify factors that limit trust
- Role-play scenarios to build or re-build trust with community members
- Role-play to become aware of social identities, and learn how to incorporate that into effective communication strategies
- Build communication skills, including active listening and the LARA method

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.



# Unit 4 – Public Health Preparedness

## Overview

Human health depends upon the health of the environment in which we live. Usually, we try to shape our environment to make us healthier. For example, we create systems to bring us clean water and to take away our waste. Or, we try to plant trees to keep land from washing away, and also to filter the air. Unfortunately, sometimes we make changes to our environment that have the unintended effect of hurting our health. For example, we burn fossil fuels like coal, oil and gas to warm us, cook, and generate power. These actions help us, as humans, in the short term, but the unintended consequences are that we also pollute the air and affect our climate.

Sometimes people think issues like air pollution or natural disasters are “too big.” Too big to solve and too big for any one person’s actions to matter. But, there are things we can each do that will help protect ourselves. And, when put together, these individual actions can add up to make a real difference for everyone. We start with understanding what the risks are. In this course, using a case-study approach, we will take a look at some of the main environmental issues that affect our health. Looking back at history, and into the future, we will share ideas to help you see your role in addressing these 'wicked' problems.

## This unit has five modules:

- Module 1: Air Pollution
- Module 2: Climate Change
- Module 3: Biodiversity
- Module 4: COVID-19
- Module 5: Emergency Preparedness

## Overall Learning Outcomes

### After completing this module, learners will be able to:

- Describe how we can learn from history to inform the future
- Recognize environmental risks to human health
- Recognize the impacts of environmental changes on current health problems, and on future conditions affecting human health
- Identify the disproportionate burdens of these change on some specific communities
- Identify opportunities to shape the health of the environment, and the health of ones community
- Research and consider ways to become more skilled in emergency preparedness and response
- Develop an action plan to learn more about and support emergency preparedness in your community
- Develop a public health and empowerment presentation for your community

## Overview

What is air pollution and how does it affect your health? We often think of air pollution as “bad” air or smog hanging like clouds over a city. But did you know you could be exposed to air pollution even if the air looks clear?

In this module, learners explore one type of air pollution that can hurt our health: PM 2.5. This pollutant causes many symptoms, ranging from light coughing due to mild lung irritation to chronic lung disease, heart disease, and cancer. This public health issue made some people more at risk of serious outcomes from COVID-19.

## Specific Learning Objectives

**After completing this module, learners will be able to:**

- Describe why air pollution is bad for people
- Explain where PM 2.5 comes from, and how it impacts our health
- Discuss how fixing public health and environmental concerns related to air pollution is possible
- Describe how to reduce exposure to air pollution now
- Explain how and why air pollution disproportionately affects some communities over others

## Applied Activities

**To deepen and demonstrate capacity growth, learners:**

- Describe what air pollution is, and how it affects people
- Predict who, in local communities, bear the disproportionate health effects
- Develop a summary statement of need
- Develop an action plan to learn more about, and address, air pollution

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Overview

Does it seem to you like you are hearing more and more about extreme weather events occurring in the United States and throughout the world? And sometimes, that news can seem contradictory — devastating hurricanes and 100-year floods on one hand, but droughts on the other. Heat waves where it is usually cold and extreme cold in places that are usually warm.

It's not your imagination, and it's not the 24-hour news cycle repeating bad news. There are more severe weather events today than ever in recorded history.

This module introduces learners to climate change, and how related weather events affect our health.

## Specific Learning Objectives

After completing this module, learners will be able to:

- Describe what climate change is
- Debate that climate change is real, and describe how it is affecting people globally
- Explain how climate change affects the weather, including severe weather events
- Demonstrate how climate changes are having negative effects on human health
- Describe why climate change affects some populations more than others, which creates and enhances current inequities
- Explain how our actions can improve the effects of climate change

## Applied Activities

- **To deepen and demonstrate capacity growth, learners:**
- Describe what climate change is, and how it affects people
- Predict who, in local communities, bear the disproportionate health effects
- Develop a summary statement of need
- Develop an action plan to learn more about, and address, climate change

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.



## Overview

Our world is in the midst of the sixth mass extinction. You might wonder: is that bad? Why?

Regardless of how one feels about specific animals becoming extinct, it is important to recognize the importance of diversity on our health. Biodiversity is the rich variety of life on Earth. That includes a diversity of animals and all types of life such as plants and microorganisms.

This module helps learners see how biodiversity plays an important role in the health of the planet, which of course, affects our individual health.

## Specific Learning Objectives

**After completing this module, learners will be able to:**

- Discuss how healthy biodiversity enables a healthy planet and healthy people
- Describe how humans receive direct and indirect benefits from the work of all species
- Explain actions that support biodiversity will also improve our physical and mental health
- Describe how human activity has a direct impact on the loss of biodiversity, even though biodiversity is critical to human health
- Explain actions that we can take to support biodiversity, and how that will reduce the risk of infectious diseases jumping from wildlife to humans

## Applied Activities

**To deepen and demonstrate capacity growth, learners:**

- Describe what biodiversity is, and how it affects people
- Predict who, in local communities, bear the disproportionate health effects
- Develop a summary statement of need
- Develop an action plan to learn more about, and address, biodiversity loss

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Overview

COVID-19 has killed millions of people, led to economic difficulties for entire countries and individual families, and affected daily life for everyone worldwide. But what does COVID-19 have to do with environmental-related illnesses and dangers?

In this module, learners will see that COVID-19 is a case study in how environmental factors worked together both to create this pandemic and worsen the health outcomes.

## Specific Learning Objectives

**After completing this module, learners will be able to:**

- Describe what viruses are
- Explain what COVID-19 is, and where it came from
- Explain that SARS-CoV-2 is not the first virus to jump from animals to people and cause disease
- Discuss how our interactions with nature, such as over-harvesting of wild species, mixing of animals in wet markets, and destruction of natural habitat, have led directly to new diseases entering people, including SARS and SARS-CoV-2
- Describe how other environmental factors, including air pollution caused by the same burning of fossil fuels that causes climate change, worsened the health outcomes of people once they got COVID-19

## Applied Activities

**To deepen and demonstrate capacity growth, learners:**

- Research viruses, SARS-CoV-2, bacteria, and antibiotics to understand COVID-19 and the public health response
- Develop an action plan to learn more about, and address, COVID-19 and other emergent diseases

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

## Overview

Natural disasters have always been with us, but the number and severity of weather-related disasters are on the increase. While efforts to manage climate change will help in the long-run, it is critical that you think about how to protect yourself and your family in the here and now.

This module orients learners to the field of emergency preparedness, and helps them be agents of prevention and preparedness in their communities.

## Specific Learning Objectives

**After completing this module, learners will be able to:**

- Describe what extreme weather events are, including wildfires, hurricanes, temperature extremes, droughts, and floods
- Explain why extreme weather events are becoming more dangerous due to climate change
- Describe the impacts that extreme events have on health, property, and economies
- Discuss how planning and prevention are the best medicine
- Make plans to respond to and recover from disasters

## Applied Activities

**To deepen and demonstrate capacity growth, learners:**

- Research and consider ways to become more skilled in emergency preparedness and response
- Develop an action plan to learn more about and support emergency preparedness in your community

We encourage you to ask your Fellow to share what they've learned and what they've developed! Fellows learn that their ideas are just a start; input from peers makes ideas better.

# For More Information



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