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HSC 315:
Public Health
6/24/19

AGENDA

Course Logistics

- PBL & Course Refresher
- Update on Evaluation of ASSIGNMENT 1

ASSIGNMENT 2: Health Policy Issue Brief

- Bardach's Eightfold Path
- Information Needs
- Policymakers and Policies

WHY PROBLEM-BASED LEARNING?

“[Problem Based Learning] provides **relevance**, encourages **self-directed learning**, targets **higher-order learning** and engages students in ways that result in **better long-term retention of content** than traditional, lecture-based courses.”

Barral, J. M., & Buck, E. (2013). What, how and why is problem-based learning in medical education? *ASBMB Today*, 12(8), 34-35.

TRADITIONAL CLASSROOM VS PROBLEM-BASED LEARNING

Traditional Classroom

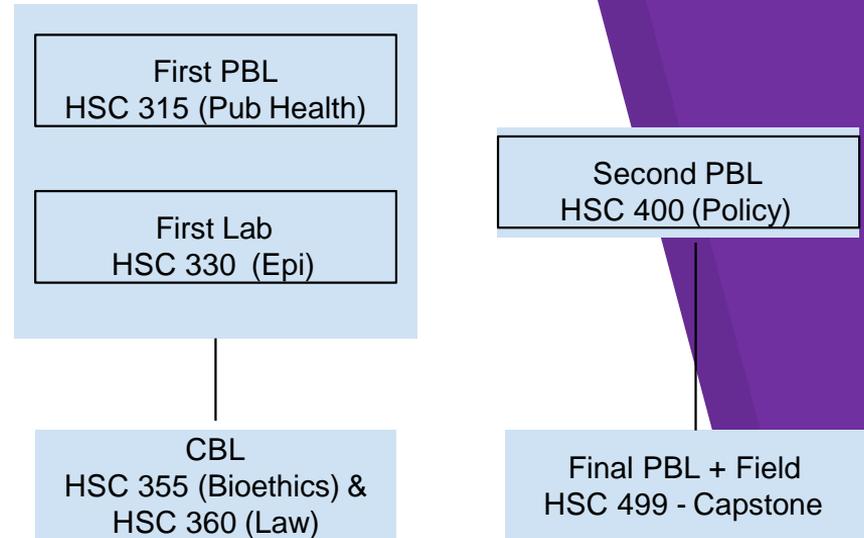
- Lecture
- Teacher-driven process
- Research papers & tests
- Individual assignments

Problem Based Learning

- Content based on student information needs
- Student-driven process
- Real world deliverables
- Team assignments analogous to professional employment

HSC 315: Introduction to PBL across the Health Sciences Curriculum

- ▶ Guided & Defined vs. Self-Directed
- ▶ Professionalism
- ▶ Knowing when to seek help



EVALUATION OF ASSIGNMENT 1

- ▶ Prof. Mukherjea is currently evaluating ASSIGNMENT 1
- ▶ CATME survey responses are being collected from students for generation of Individual Contribution Scores
- ▶ Final scores for MODULE 1 will be posted by 6/30/19, including individual and team assessments for ASSIGNMENT 1 as well as Lecture Attendance

Introduce Vaccines to Reduce Typhoid Disease Burden in Malawi

Ambonishe O. Mwalwimba

July 2016



Policy Brief

Introduction

Malawi has been experiencing frequent outbreaks of typhoid fever and increase in multi-drug resistant *Salmonella typhi*, which causes typhoid fever. From 2009 to date, the country has been experiencing multiple outbreaks in the districts of Neno, Mwanza, Dowa, Mchinji and Kasungu. These outbreaks have resulted in more than 1000 cases of typhoid fever and 50 deaths. Laboratory test results show widespread resistance to first-line drugs and isolates from the Neno and Mwanza outbreaks were multi-drug resistant [1-3]. As such, multi-drug resistant *Salmonella typhi* is a growing public health problem in Africa [3].

Multiple severe or life-threatening complications can occur in typhoid fever involving intestinal perforation associated with high case-fatality rates as seen in other parts of Africa and zoonotic manifestations in Malawi and Mozambique [1-3]. Varied and atypical presentations of typhoid fever in the paediatric age group and older children, respectively, result in delayed diagnosis of typhoid fever in children or even children remaining unrecognised [4].

Methodology

This policy brief is based on a comprehensive review of existing literature. The literature reviewed included scientific papers, research reports and government policy documents.

Discussion of Policy Options

Despite the foregoing, the country does not have a clear strategy on how to contain the subsequent multiple outbreaks of typhoid fever, and respond to the problem of multi-drug resistant typhoid fever. There is, therefore, an urgent need to come up with effective public health strategies that will contain both the typhoid fever outbreaks and the growing threat of multi-drug resistant *Salmonella typhi* causing typhoid fever.

Currently, there is an array of public health non-vaccine- and vaccine-based prevention interventions that have proven to work elsewhere [3-6]. Since the outbreaks have been of multi-drug resistant typhoid fever (MDRTF), as such introducing a typhoid fever vaccine would lessen the burden of the disease, thereby reducing transmission of MDRTF through outbreaks due to the herd protection that the vaccines can confer.

Key Messages

- Malawi has a significant public health problem of typhoid fever and multi-drug resistant *Salmonella typhi* that causes typhoid fever.
- The country has no clear strategy on how to contain outbreaks of typhoid and to respond to the problem of multi-drug resistant typhoid fever.
- There is need for vaccine-based prevention interventions as additional measures to complement non-vaccine public health interventions.
- The government should consider the adoption of the available safe and efficacious typhoid fever vaccines.

Need for typhoid vaccine to complement the current public health approaches to tackling the problem

Improvements in drinking water and sanitation infrastructure and in food safety are the definitive longer-term solutions to preventing transmission of typhoid fever and other enteric infections. These strategies, however, take a long time to fully fund and implement. For instance, in Malawi by the year 2009 only 56% (far below the MDG target of 75%) and 80% of the population had access to improved sanitation and improved source of water, respectively [5]. Hence, the World Health Organization (WHO) recommends wider use of typhoid fever vaccines in endemic countries in addition to water, hygiene and sanitation interventions for outbreak control [3]. In addition, the changing behaviours, and the increase in antimicrobial resistance, heighten the potential benefits of targeted immunisation programmes in outbreak settings [7].

"The country does not have a clear strategy on how to contain the subsequent multiple outbreaks of typhoid fever, and respond to the problem of multi-drug resistant typhoid fever."

Therefore, vaccination is an effective way to try to prevent typhoid fever. Currently, two typhoid fever polysaccharide vaccines, namely, Ty21 and Vi are licensed as being safe and efficacious. A

ASSIGNMENT 2: HEALTH ISSUE POLICY BRIEF

You are a member of a task force that has been asked to recommend a plan for infectious disease control, based on relevant health policies and regulations. Your task force is expected to create a policy brief highlighting at least one major policy intervention (ideally, two or three) which is/are within the authority of your assigned organization – the recommendations should be quickly actionable – to promptly be put into effect once Zika infection and associated disease is found in the population whose health you are responsible for protecting. Your plan should also take into account current climate projections to estimate likelihood of the presence of Zika vectors in your jurisdiction. In other words, how should control of Zika be incorporated into climate adaptation plans for your jurisdiction?

Due date: July 14, 2019 @ 11:59 PM via Blackboard

KEY COMPONENTS

- ▶ Problem Definition
- ▶ Description of Proposed Health Policy(ies)
- ▶ Make the Case
- ▶ Discussion of Intended / Desired Impacts



TECHNICAL REQUIREMENTS



- ▶ 2-4 pages (excluding Reference List)
- ▶ Singled-spaced
- ▶ 12 pt. Times New Roman font
- ▶ APA Citations (in-text and Reference List)

WHAT IS A HEALTH POLICY ISSUE BRIEF?

What it IS

- ▶ Clear, specific purpose, targeted audience
- ▶ Analytic & objective
- ▶ Brief!
- ▶ “A focused discussion of an action to achieve intentional and purposeful movement” (p. 21)

What it is NOT

- ▶ Not an advocacy statement
- ▶ Refrains from advocating a singular call to action
- ▶ Not an opinion piece.

Adapted from:

Wong, S., Green, L., Bazemore, A., Miller, B., Fogarty, Colleen T., & Mauksch, Larry. (2017). How to write a health policy brief. *Families, Systems, & Health*, 35(1), 21-24.

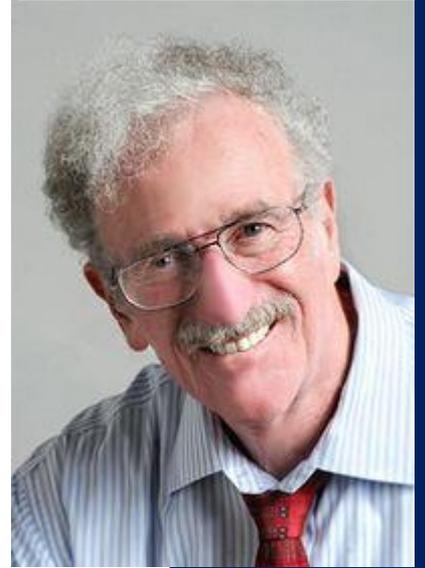
BARDACH'S EIGHTFOLD POLICY

System for thinking about problem solving, promoting:

- ▶ Effective, accurate, and persuasive policy analysis
- ▶ Policy design
- ▶ Creative & “out-of-the-box” policy solutions

EdX Course:

[Solving Public Policy Problems: UC Berkeley's Eightfold Path](#)



Eugene Bardach, Ph.D.
Professor Emeritus of
Public Policy
UC Berkeley

The **Policy Action Plan** is an Issue Brief based on the Eightfold Path for Policy Analysis (Bardach 2015)

Emphasis of ASSIGNMENT #2 is on first four steps:

- ▶ **Define the Problem**
- ▶ **Assemble Some Evidence**
- ▶ **Construct the Alternatives**
- ▶ **Select the Criteria**
- ▶ Project the Outcomes
- ▶ Confront the Trade-offs
- ▶ Stop, Focus, Narrow, Deepen, Decide!
- ▶ Tell Your Story

QUESTIONS TO CONSIDER

- Problem Definition (similar to Population Fact Sheet)
 1. Who is the target audience? How will you find them?
 2. What relevant information on Zika do these people need to know in regards to their jurisdictions: demographics, high risk groups, geographies, and climate change impacts?
 - 3. What authority does your health organization (and appropriate entity) have to control and prevent disease? What are the limits of the authority as allowed by law or statute?**

- Description of Proposed Health Policy(ies)
 1. What existing health policies in my jurisdiction may influence (positively or negatively) spread of Zika, especially among at-risk populations?
 2. What similar policies exist in other jurisdictions that could be applied here to combat Zika?

QUESTIONS TO CONSIDER

- Make the Case
 1. How do proposed or existing policies in other jurisdictions apply to your jurisdiction, particularly with regard to high risk groups?
 2. How might climate change impact these policies?
- Discussion of Intended / Desired Impacts
 1. What measurements of success are being used in similar policies?
 2. What are some unintended consequences (population benefit vs. individual rights)?
 3. How will you rank outcomes?
 4. How will your proposed policy(ies) impact existing policies in your jurisdiction?

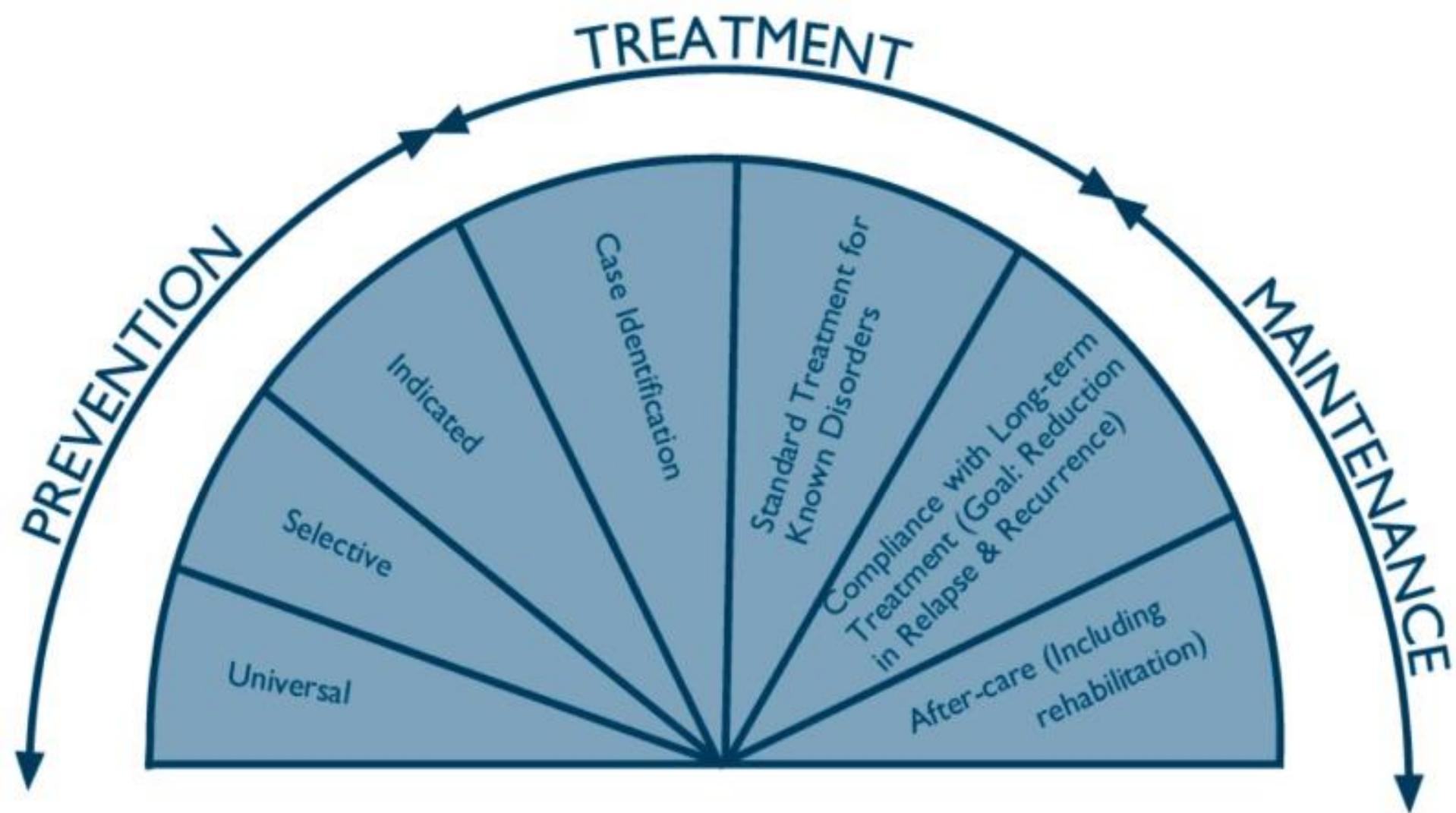
WHERE TO START...

Findings answers to these key questions:

- ▶ Which particular unit in your government organizations is tasked with epidemics and/or infectious disease control?
- ▶ Where are the administrators charged with policy writing related to this topic (or similar topics) already working within the health organization?
- ▶ What specific authority does the appropriate health entity have to control infectious disease? What are they allowed (and not allowed to do)?

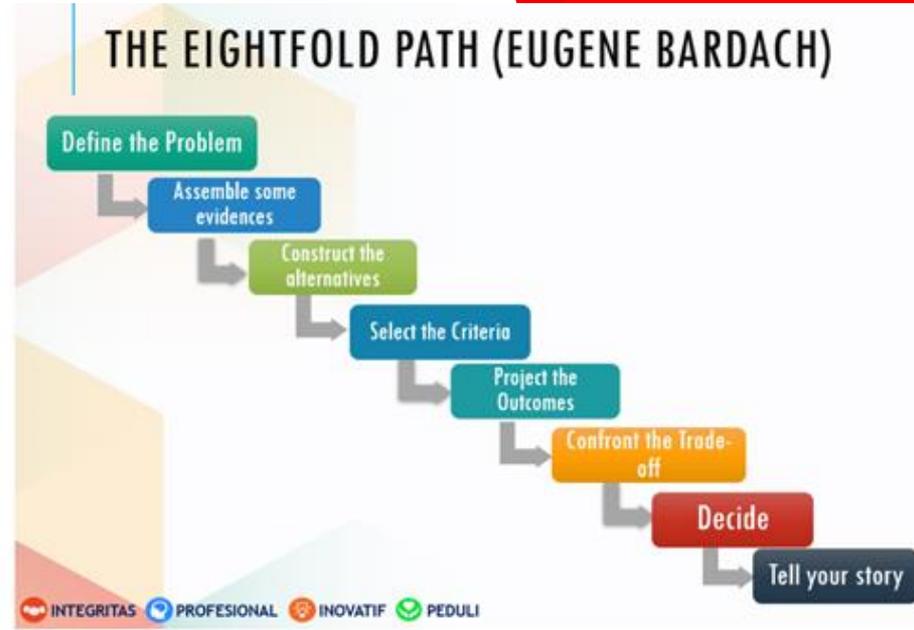
Government Webpages

- National: <https://www.hhs.gov/>
- State: <https://www.cdph.ca.gov/>
- County: <http://www.acphd.org/>



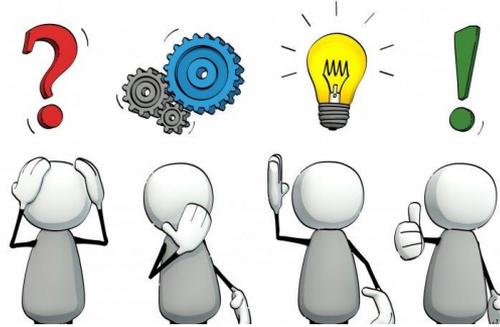
BARDACH'S EIGHTFOLD POLICY

1. Define the problem
2. **Assemble some evidence**
3. Construct the alternatives
4. Select the criteria
5. Project the outcomes
6. Confront the trade-offs
7. Stop, focus, narrow, deepen, decide!
8. Tell your story



ASSEMBLE SOME EVIDENCE

- Start early
- Think before you collect
- Review the available literature
- Survey “best practices”
- Use analogies
- Touch base, gain credibility, broker consensus
- Free the captive mind



Thinking (generally more important) & collecting data / information (generally more time consuming) are complimentary

- “Try to collect only those data that can be turned into ‘information’ that, in turn, can be converted into ‘evidence’ that has some bearing on your problem.” (p.13)

FINDING RELEVANT POLICY RESEARCH

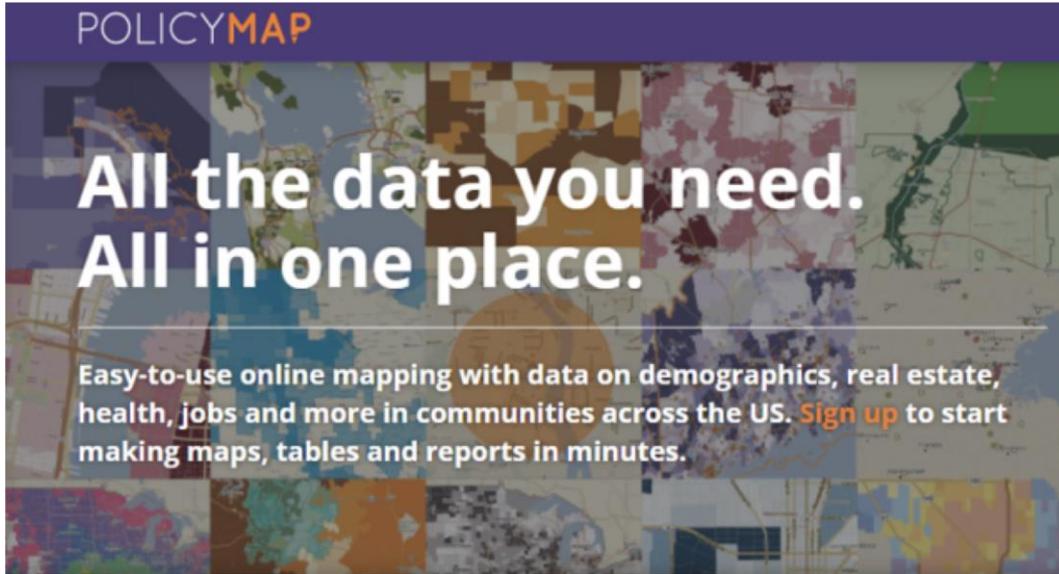
Databases

- [Academic Search Complete](#)
- [CQ Researcher Plus Archive](#)
- [Political Science Abstracts](#)
- [Public Affairs Information Service \(PAIS\) International](#)
- [WestlawNext](#)
- [Advanced Google Search](#)

Government Sources / Think Tanks

- [Association of State and Territorial Health Officials](#)
- [Catalog of U.S. Government Publications \(CGP\)](#)
- [MetaLib](#)
 - Searches multiple U.S. Federal government databases, retrieving reports, articles, and citations
- [Think Tank Search \(Harvard Kennedy School Library\)](#)

POLICYMAP



POLICYMAP

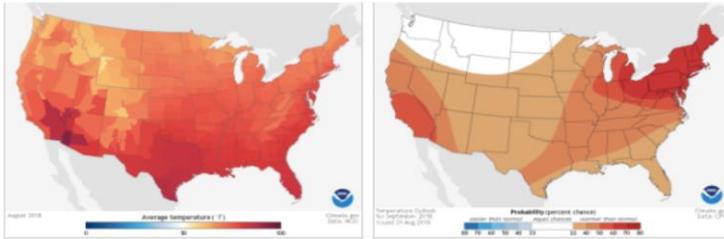
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- Support Videos: <https://www.policymap.com/videos/>

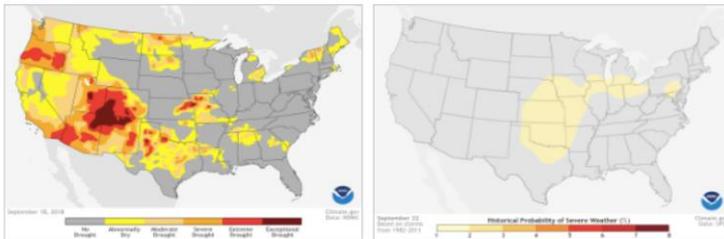
CLIMATE CHANGE

<https://www.climate.gov/maps-data>



Average Monthly Temperature

Monthly Temperature Outlook



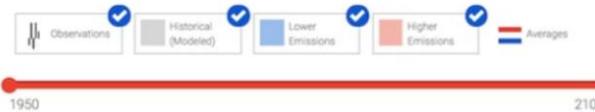
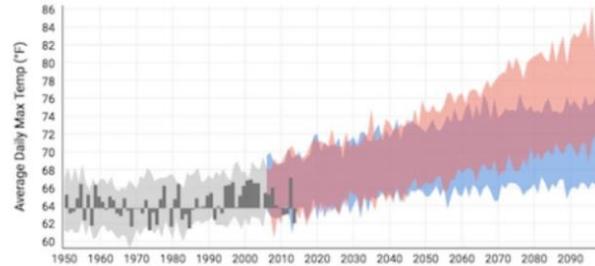
Drought Monitor

Severe Weather Climatology

<https://toolkit.climate.gov/#climate-explorer>

Chart: Grand County
Annual Avg Daily Max Temp (°F)

How to read this Image Data





Health Professional & Laboratory Mandatory Reporting Overview Grid



Home | Program Home | About | FAQ | Comment | Contact | A-Z Index

Font Size | A A A

Mandatory Reporting Requirements for Infectious Diseases: Los Angeles County

Communicable Disease & Reporting-Related Programs

- Acute Communicable Disease Control Program (ACDC)
- Tuberculosis Control Program (TBC)
- Division of HIV & STD Programs (DHSP)
- Vaccine-Preventable Disease Control Program (VPDC)
- Veterinary Public Health Program (VPH)
- Public Health Laboratories (PHLabs)

Other Resources

- [Health Provider Public Health Resources Page](#)
- [LA County Public Health](#)

Health Professional & Laboratory Mandatory Reporting Overview Grid (updated February 19, 2019)

See also

➤ [About Mandatory Disease Reporting in California](#) (follows the table below)

➤ **Patient Confidentiality Concerns?** See California DPH (June 15, 2012): [Letter To All California Health Care Providers: HIPAA and Public Health Disclosures](#)

NEW (January 2019): Scabies (all types) now is only locally reportable if an outbreak (2 or more cases).

HEALTH PROFESSIONAL & LABORATORY MANDATORY REPORTING OVERVIEW GRID:

To report:	Form to use:	Disease Reporting-Related DPH Program's Webpage & Phone Number if needed:
Laboratories Must Report: Laboratory-Reportable List - for LA County (912mod1018.pdf)	See Laboratory-Reportable List See also HIV, STD, TB (below)	Hotline: (888) 397-3993 Fax: (888) 397-3778 or (213) 482-5508 See also: Public Health Laboratory webpage
Infectious Disease (except HIV, STD, TB see below): (.lan2019.pdf) Reportable Diseases & Conditions List - LA County	<ul style="list-style-type: none"> Confidential Morbidity Report Form (Web-fillable) CMR form-H794rev82118-.pdf	Acute Communicable Disease Control Program (ACDC) Hotline: (888) 397-3993 Fax: (888) 397-3778 or (213) 482-5508

14 CRR-NY 633.14
NY-CRR

OFFICIAL COMPILATION OF CODES, RULES AND REGULATIONS OF THE STATE OF NEW YORK
TITLE 14. DEPARTMENT OF MENTAL HYGIENE
CHAPTER XIV. OFFICE FOR PEOPLE WITH DEVELOPMENTAL DISABILITIES
PART 633. PROTECTION OF INDIVIDUALS RECEIVING SERVICES IN FACILITIES OPERATED AND/OR CERTIFIED
BY OPWDD

14 CRR-NY 633.14
14 CRR-NY 633.14

633.14 Procedures for the control of tuberculosis.

(c) Testing for TB.

(1) Initial testing.

- (i) All employees, volunteers, contractors, family care providers and approved substitute/respite providers shall have TB testing completed prior to their first day of employment or service provision. If using the two-step PPD, individuals may begin work if the first TST is negative.
- (ii) All service recipients shall either provide proof of TB testing within the last 12 months or be assessed for signs and symptoms of active pulmonary tuberculosis on or prior to their first day of receipt of service. TB testing must be carried out within seven days of the first day of receipt of service.
- (iii) An employee, contractor, volunteer, family care provider, approved substitute/respite provider or service recipient may select testing by his/her health care provider. The results of the TB testing and any necessary follow-up evaluation must be documented and shared with the service provider or sponsoring agency prior to or on the first day of employment or service provision or receipt of services.

(2) Annual testing – developmental centers only.

- (i) TB testing shall be conducted on an annual basis for employees, volunteers, contractors, and service recipients who provide/receive services in a developmental center.
- (ii) All service recipients, employees, volunteers, and contractors who provide/receive services in a developmental center shall receive annual TB testing within 12 months of their last documented test. An employee, contractor, volunteer or service recipient may select testing by his/her own health care provider. The results of the TB testing and any necessary follow-up evaluation must be documented and shared with the service provider.

(3) *Exposure testing.* Testing shall be conducted for all service recipients, employees, contractors, volunteers, family care providers and approved respite/substitute providers who are exposed to someone with a suspected or confirmed case of active pulmonary tuberculosis. Such exposure testing will be conducted in cooperation with the state and local health departments

Mandatory Testing Requirements for Tuberculosis in Specific Facilities

State of New York

Define the Problem

Much of this section has been provided in Assignment

- ▶ Each group should identify the populations at risk within the given constituency of the health organization
- ▶ Groups should identify the statutory authority provided to the relevant unit within the organization to create and implement public health policies
- ▶ Many such legal authorizations can be found from control of other infectious diseases
- ▶ The authority vested to health organizations should include provisions for prevention and treatment of infectious disease



1994

Public Health and Individual Rights: Tuberculosis Control and Detention Procedures in New York City

Carlos A. Ball

Mark Barnes

Assemble Some Evidence

Evidence should focus on potential policy effectiveness

- ▶ Clear definition of desired outcome must be presented
- ▶ Data gathered and analyzed will be from secondary sources; it is not expected that groups will do interviews, administer surveys, or conduct observations (primary data)
- ▶ The most appropriate sources of evidence are reviewing literature and prior/existing practices of “best” or “promising” policy strategies which address potential or actual epidemics
- ▶ When specific approaches are not available, appropriate analogies from other fields may be used as evidence for how the current problem may be addressed
- ▶ Bardach pp. 12 – 17, 84 – 86, and 89 – 90 provide a framework for developing content addressing this component

Construct the Alternatives

“Alternative strategies of intervention to solve or mitigate the problem”

- ▶ Starting point is to brainstorm all possibilities, from most ambitious to doing “almost nothing”
- ▶ For public health, this includes articulating levels of prevention and which ones should be given most emphasis for an effective response involving health policies
- ▶ A key consideration is the balance between individual rights / liberties and protection of the health of the public
- ▶ Once brainstorm is completed, the final aim of this component is to consolidate and simplify the final list of policy options to be recommended for implementation
- ▶ It is important to recognize the feasibility of recommendations within the context of the relevant entity

Please read
the following
chapter:

Pages 83 - 112

