

# UNNATURAL CAUSES ...is inequality making us sick?

A documentary and public engagement campaign from California Newsreel



## **DEBATING POLICY PROPOSALS TO IMPROVE POPULATION HEALTH: A Case Study and Simulation of the Marshall Islands**

**GRADE LEVELS:** 10<sup>th</sup> grade through sophomore year of college

**SUBJECTS:** Social Studies; Government, Civics and Political Science; Geography; Economics; Policy Studies; American History; Public Health

**TIME ALLOTMENT:** Two to five class periods, depending on how many of the five activities are implemented.

### **SUMMARY:**

How should limited public resources be deployed to tackle inequities in health? This lesson plan uses a real health crisis and a parliamentary simulation to help students assess the strengths and weaknesses of different health promotion policy initiatives and examine the roles of government, business, medical and public health systems, individuals, and community-based groups in ensuring that all citizens have the opportunity to lead healthy and flourishing lives. By the end of this activity, students will be able to argue and defend different approaches to tackling the root causes of health inequities and will better understand how the making of social policy is often influenced by political and economic factors that may have little to do with the merits of the proposals themselves.

In the first activity, students examine their own preconceptions about what drives health outcomes in populations, then learn about the social determinants of health framework by screening a five-minute clip from the UNNATURAL CAUSES series and completing some short readings. The second activity introduces the class to the Republic of the Marshall Islands, which students explore visually using Google Earth. In the third lesson, students watch the “Collateral Damage” episode of UNNATURAL CAUSES to learn about endemic tuberculosis and other health problems facing the Marshall Islands, as well as the nation’s unique relationship United States military.

In the main activity, students break into groups representing the national parliament (the *Nitijela*) and four Task Forces representing different interest groups within the Marshall Islands. Each Task Force presents a proposal to the parliament for spending a grant of \$20 million offered by the World Health Organization (WHO) to improve health on Ebeye. The members of the Nitijela consider the merits of the four proposals and vote to enact one of them.

A final discussion involves reflection on political power and decision-making, and how the situation might be improved. Students consider how health inequities arise in some countries because of “a toxic combination of poor social policies, unfair economic

arrangements and bad politics,”<sup>1</sup> and discuss the fair or appropriate role of different players in improving global health.

### **OBJECTIVES:**

By the end of the lesson, students will be able to:

- Recognize and explain the importance of social (as opposed to bio-medical) determinants of health.
- Identify several key social determinants that can make people healthy or sick, including the roles of housing and built space, economic opportunity, geographical and cultural displacement, sanitation, and political power.
- Demonstrate how the actions of rich and powerful nations can adversely affect weaker nations, disrupting traditional economies, institutions and social roles with unforeseen consequences for health.
- Identify, compare, and evaluate different policy approaches to improving population health.
- Understand why all policies (“everything a government does that shapes the conditions in which people are born, live, work, and play”) are health policies.

### **MATERIALS:**

DVD: *UNNATURAL CAUSES: Is Inequality Making Us Sick?* California Newsreel, 2008 (available from <http://www.newsreel.org>) – “Collateral Damage” (Episode 6) and “Five minute intro”

### **WEB:**

- *UNNATURAL CAUSES* companion website, <http://www.unnaturalcauses.org>
- Discussion Guide, “Collateral Damage” section, [http://www.unnaturalcauses.org/discussion\\_guides.php](http://www.unnaturalcauses.org/discussion_guides.php)
- Google Earth (free download), <http://earth.google.com>
- CIA World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/geos/rm.html>

### **READINGS**

- Larry Adelman, “Background: Trouble in Paradise,” Appendix A
- California Newsreel, “10 Things to Know about Health,” <http://www.unnaturalcauses.org/assets/uploads/file/10things.pdf>
- Madeline Drexler, “The need to combine social and health policy.” *The Boston Globe*, November 18, 2008. [http://www.boston.com/bostonglobe/editorial\\_opinion/oped/articles/2008/11/18/the\\_need\\_to\\_combine\\_social\\_and\\_health\\_policy/](http://www.boston.com/bostonglobe/editorial_opinion/oped/articles/2008/11/18/the_need_to_combine_social_and_health_policy/)

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<sup>1</sup> *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health*. WHO Commission on the Social Determinants of Health. (Geneva: World Health Organization, 2008)

- *Social Determinants of Health: The Solid Facts*. ed. Richard Wilkinson and Michael Marmot. WHO, 2003.  
[http://www.euro.who.int/InformationSources/Publications/Catalogue/20020808\\_2](http://www.euro.who.int/InformationSources/Publications/Catalogue/20020808_2)
- Christopher Leonard, “An Economic Quandary.” *Arkansas Democrat Gazette*, January 16, 2005. <http://www.ardemgaz.com/ads/mi/articles.html>
- JoAnn Wypijewski, “This Is Only a Test: Missile defense makes its mark in the Marshall Islands.” *Harpers Magazine*, December 2001 (available online only with a subscription, check your library’s archives)

HANDOUTS (accompanying each lesson)

- Exploring the Marshall Islands
- Task Force Descriptions
- Viewing Questions: Collateral Damage
- Health Threats on Ebeye
- Health Promotion Proposals and Evaluation Grid

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## ACTIVITY I: CONCEPTS AND FACTORS SHAPING POPULATION HEALTH

### Purpose:

- To examine common preconceptions and introduce some basic concepts about the root causes of population health.

### Materials:

- *UNNATURAL CAUSES: Is Inequality Making Us Sick?* DVD
  - California Newsreel, “10 Things to Know about Health,”
  - Madeline Drexler, “The need to combine social and health policy.” *The Boston Globe*, November 18, 2008.
  - *Social Determinants of Health: The Solid Facts*. eds. Richard Wilkinson and Michael Marmot.
1. Lead a poll of the class. Select some of the statements below to read aloud. Ask students to indicate by raising their hands if they: “Strongly Agree,” “Agree,” “Neutral,” “Disagree” and “Strongly Disagree.” Someone should tally results on the board. Occasionally ask students to explain the reasoning behind their opinion.
    - a. Most Americans receive exceptional health care and have excellent access to needed services, though some socioeconomic, racial and ethnic differences remain.
    - b. CEOs face more stress and are therefore at greater risk of heart disease than middle managers or other workers.
    - c. Poor smokers face a greater risk of getting lung cancer and heart disease than rich smokers.
    - d. People of color are more vulnerable to health ailments because drugs do not work as well on them due to their different genetic make-up.
    - e. Providing better education about diet, tobacco, and exercise is the best thing governments can do to promote better health.
    - f. The 30-year increase in American life expectancy occurred during the 20<sup>th</sup> century primarily because of the invention of new drugs and other medical advances.
    - g. The 30-year increase in American life expectancy occurred during the 20<sup>th</sup> century primarily because of social changes like the eight-hour workday, the Wagner Act, sanitation and housing regulations, social security, and civil rights laws.
    - h. Political decisions (laws and social policies) have a greater impact on population health than individual behaviors (diet, smoking, and exercise).
  2. Screen the “Five minute intro” to UNNATURAL CAUSES.
  3. Lead the students in a short discussion or have them do a five-minute quick-write on whether the video affected their beliefs about the previous statements. The following prompts can help direct the discussion or writing:
    - a. What did you see that supported your answers? What did you see that caused you to question your answers? What was surprising or disturbing?

- b. What questions or uncertainties do you still have? What would you like to know more about?
  - c. What might affect health outcomes other than health care, behaviors, and genes?
  - d. What is the difference between population health and individual health?
4. Assign “Ten Things to Know About Health” and Madeline Drexler’s editorial as in-class or homework reading assignments. Advanced students might read *The Solid Facts* in addition to or instead of the Drexler editorial.
  5. Either as individual homework or in-class group work, have students write a short paragraph explaining and expanding on one or more of the following statements, based on what they have learned from the film and their readings:
    - a. Health is more than healthcare
    - b. Wealth equals health
    - c. Racism imposes an additional health burden.
    - d. The personal health choices we make are constrained by the choices we have.
    - e. High demand / low control lives (and jobs) can be toxic
    - f. Inequality is bad for our health
    - g. Social policy is health policy

Discuss their responses as a class. (Sample responses in Appendix B)

## ACTIVITY II: INTRODUCTION TO THE MARSHALL ISLANDS

**Purpose:** To introduce students to some basic Marshall Islands geography and demographics.

### Materials:

- Computer terminals with Google Earth installed
  - Handout: Exploring the Marshall Islands
  - CIA World Factbook – Republic of the Marshall Islands, online or printed
  - Christopher Leonard, “An Economic Quandary” *Arkansas Democrat Gazette*, January 16, 2005.
  - JoAnn Wypijewski, “This Is Only a Test: Missile defense makes its mark in the Marshall Islands.” *Harpers Magazine*, December 2001 (if available)
1. Divide students into groups of four and assign each group to a computer with Internet access and Google Earth installed. Each group should have a copy of the Exploring the Marshall Islands handout (below)
  2. Have students complete the worksheet using the online CIA World Factbook and Google Earth.
  3. Assign “An Economic Quandary” or “This is Only a Test” as homework reading.

## Exploring the Marshall Islands

First visit the CIA World Factbook pages on the Republic of the Marshall Islands:  
<https://www.cia.gov/library/publications/the-world-factbook/geos/rm.html>

Answer the following questions:

1. Where are the Marshall Islands?
2. When did the nation become independent? From whom?
3. What is notable about the nation's relationship with the United States?
4. How many people live there?
5. What are the country's major economic activities and sources of income?
6. What is the nation's median income? What is its unemployment rate?

Next, explore the Marshall Islands using Google Earth, zooming in to better understand the Republic's location and geography.

Locate the islands of **Ebeye** and **Kwajalein** and try to get a sense of conditions on both of them from the air. (Note that some of the areas of Kwajalein may be blurred out on Google Earth. Those are secret U.S. military facilities).

Then answer these questions:

1. What are "atolls"?
2. What differences do you see between Kwajalein and Ebeye?
3. Is there anything you can detect using Google Earth that might provide hints as to the health of residents of Kwajalein vs. Ebeye?

## KEY: Exploring the Marshall Islands

First visit the CIA World Factbook pages on the Republic of the Marshall Islands:  
<https://www.cia.gov/library/publications/the-world-factbook/geos/rm.html>

1. Where are the Marshall Islands? *In the North Pacific Ocean, about halfway between Australia and Hawaii.*
2. When did the nation become independent? From whom? *1986, from the United States (technically, it was under U.S. administration as part of the U.N. Trust Territory of the Pacific Islands)*
3. What is notable about the nation's relationship with the United States? *It was used for nuclear testing. It is the site of the Reagan Missile Test Site. It has received over \$1 billion in aid from the U.S.*
4. How many people live there? *64,522*
5. What are the country's major economic activities and sources of income? *Mostly service industry and subsistence agriculture. Copra (dried coconut), breadfruit, tuna processing, tourism, craft items.*
6. What is the nation's per capita (median) income? What is its unemployment rate? *\$2,500, 36%*

Next, explore the Marshall Islands using Google Earth, zooming in to better understand the Republic's location and geography.

Locate the islands of **Ebeye** and **Kwajalein** and try to get a sense of conditions on both of them from the air. (Note that some of the areas of Kwajalein may be blurred out on Google Earth. Those are secret U.S. military facilities). Click on the small blue squares to see pictures of the islands.

1. What is an atoll? *A circle of low islands formed by a coral reef*
2. What differences do you see between Kwajalein and Ebeye? *Kwajalein has more green space and is much less crowded. Almost all of Ebeye is covered in buildings. The facilities on Kwajalein look more modern and well-maintained.*
3. Is there anything you can detect using Google Earth that might provide hints to the health of residents of Kwajalein vs. Ebeye? *Poor, crowded housing could contribute to poor hygiene, contagious diseases, and hence poor health. Ebeye looks poorer, and therefore may have worse health, etc.*

### ACTIVITY III: HEALTH IN THE MARSHALL ISLANDS

**Purpose:** To help students deepen their understanding of factors that contribute to poor health in the Marshall Islands.

**Materials:**

- *UNNATURAL CAUSES* DVD, “Collateral Damage” episode
- Optional: Discussion Guide, “Collateral Damage” section
- Handout: Task Force Descriptions
- Handout: Viewing Questions for Collateral Damage
- Handout: Ranking Health Threats

1. Assign students to one of five groups: four Task Force groups plus the parliament of the Republic of the Marshall Islands, known as the *Nitijela*. Give each group a description of its Task Force, below.
2. Tell them that each Task Force will be recommending to the Nitijela a plan for spending \$20 million to improve health in the Marshall Islands. (Note that this is a simplified simulation, as governance in the Marshall Islands also involves an extended and complex system of clans, which are beyond the scope of this lesson.)
3. Screen the 28-minute “Collateral Damage” episode of *UNNATURAL CAUSES*. Ask students to consider the interests of their Task Force while watching the episode. You may choose to provide them with the viewing questions to complete as they watch.
4. Select some of these questions for a class discussion reflecting on the film. (More questions available in the *UNNATURAL CAUSES* Discussion Guide.)
  - a. Why do you think the U.S. chose the Marshall Islands to conduct their nuclear tests? What role might the imbalance of power between the U.S. and the Marshall Islands have played in that decision? Do you think that decision would have been different if the islands were closer to U.S. territory or home to people of European descent?
  - b. How have globalization and the U.S. military presence disrupted the economy, culture and diet of the Marshallese? Is it desirable (or even possible) for them to return to traditional ways? What about other forms of empowerment and economic development?
  - c. What forces push(ed) many Marshallese off the outer islands and what pulls them to Ebeye, even though it is so poor and overcrowded? Can you think of places elsewhere in the world where this “push / pull” migration pattern occurs? How does it affect population health?

- d. Former health minister Tony De Brum says: “Providing more doctors or nurses on Ebeye is not going to solve [the health] problem. There has to be a political decision made.” What does he mean? Do you agree?
5. After the discussion, have students meet in their Task Force groups. Provide each group (or each student) with the Health Threats on Ebeye handout. Remind the class of your discussions from Activity 1, and have each group rank the importance of the factors on the health of the people of Ebeye.

If students have trouble ranking these effects, explain that this is the point: Many of these health threats are intertwined. Which of the factors do students think are the underlying drivers of bad health, or “causes of the causes”?

Finally, have students identify which of these factors are important to their particular task force, and which of the factors their task force has some influence over.

## **Marshall Islands Task Force Descriptions**

### **Community Coalition Task Force:**

The coalition consists of workers on Kwajalein and Ebeye, farmers, fishermen and former fishermen, the unemployed, representatives of women's and youth groups, and religious leaders. They focus on organizing citizens to demand a larger voice in economic and political decision-making while reclaiming Marshallese cultural traditions that have been disappearing with relocation and globalization.

### **Public Health Worker Task Force:**

This group includes doctors and nurses who treat illnesses, along with public health workers who try to prevent disease by enforcing sanitation and other health codes, promoting healthy behaviors, and monitoring and treating diseases like TB to prevent its spread.

### **Ronald Reagan Missile Base Task Force:**

This group consists of officials from the U.S. Department of Defense, U.S. State Department, and the Raytheon Company, the defense contractor which runs the base and tests radar and missile-defense weapon systems (part of the "Star Wars" program, thus far unproven). The U.S. is the largest economic force in the islands. Under the Compact of Free Association, the U.S. is responsible for the security and defense of the Marshall Islands.

### **Business and Landowners Task Force:**

This Task Force represents the Marshallese elite, who have substantial economic and political clout. It consists of property and business owners, including the traditional landowners on Kwajalein who receive lease payments from the Missile Base. The most profitable industries in the Marshalls are *copra* (dried coconut meat), coconut oil, handicrafts, and the licensing of fishing rights to foreign vessels (mostly Taiwanese).

### **Parliament of the Republic of the Marshall Islands (the Nitijela):**

The Nitijela consists of 33 representatives elected by popular vote to four-year terms. They elect the president of the Republic. Electoral districts correspond roughly to each atoll of the Marshall Islands, and Ebeye and Kwajalein share senators. The government receives 44 percent of its budget from the U.S. government, though the U.S. is gradually reducing annual payments with plans to end them in 2018 when parts of the Compact of Free Association expire.

## Viewing Questions: Collateral Damage

1. Two billion people are infected with the tuberculosis bacterium, but only a small number become infected. Why?
2. What caused the TB rate to drop 75% in the United States between 1900-1940, even before drugs to combat the disease had been discovered?
3. Dr. Neal Palafox says that for Marshall Islanders, displacement and cultural loss have been even more damaging to health than the actual effects of nuclear testing. How might the displacement have damaged their health?
4. Contrast living conditions on Kwajalein and Ebeye. What kinds of daily stressors do poor Marshallese on Ebeye encounter that American residents of the U.S. military base on the Marshall Islands do not? Why are conditions so different?
5. Why do so many Marshallese end up in Springdale, Arkansas? According to the public health nurse in the film, what conditions make the adjustment difficult for them?

## Health Threats on Ebeye

First, rank the following factors in order of importance, with 1 having the largest impact and 14 the smallest.

<b>FACTOR (1 = largest impact; 14= smallest impact)</b>	<b>RANK</b>
Poor, crowded housing	
Lack of employment	
Lack of reliable potable water, sanitation, and electricity	
Banning Marshallese from Kwajalein outside working hours without a special permit	
Radiation fallout from the nuclear testing	
Displacement and relocation for nuclear testing	
The Reagan Missile Base and economic dependence on the U.S	
Disruption of their traditional economy and way of life	
Poor medical facilities and lack of doctors and nurses	
A modern diet	
Poor schools	
Unlucky geography and lack of resources	
Feelings of frustration, disempowerment, and futurelessness	
Lack of capital and foreign investment	

Which of these factors are especially important to members of your task force?

Which of these factors do members of your task force have some influence over?

## ACTIVITY IV: EVALUATING THE PROPOSALS

**Purpose:** To introduce students to different policy approaches to improving population health and encourage reflection on the effects of these policies on different groups within society

**Materials:** Health Promotion Proposals and Evaluation Grid handout

1. Have the students break into their Task Force and Nitijela groups. Explain that the World Health Organization (WHO) has offered a \$20 million grant to address health problems in Ebeye, especially tuberculosis.

Four different health promotion proposals are under consideration for spending the \$20 million, each representing a different approach to public health. The government has convened the four Task Forces to evaluate the proposals to recommend one for adoption by the Nitijela.

Pass out copies of the Health Promotion Proposals and Evaluation Grid

2. In their Task Forces and among the Nitijela, must students assess the pros and cons of each proposal from the perspective and self-interest of their Task Force.

They must then choose **one** proposal that best reflects their **own** interests, and develop arguments to persuade the Nitijela that this proposal should be adopted. Each group must divide up the speaking responsibilities and structure their five-minute presentation to the Nitijela.

The Nitijela group must consider the pros and cons of each proposal and prepare to question the Task Forces.

## **Proposals for a WHO Grant to Improve Health in the Marshall Islands**

### **“Prescription for Health”: A Medical Model**

*Prescription for Health* calls for improving treatment of tuberculosis by investing in the island’s medical infrastructure.

1. Increase the number of public health workers to test for TB and administer medications to infected individuals.
2. Increase quarantine locations on Ebeye where those infected with TB can live until they are cured, protecting the community from contagion.
3. Invest in more primary care clinics and improvements to existing ones.
4. Stock up on inventory of new generation antibiotics effective against multiple drug resistant (MDR) tuberculosis.
5. Improve public health education programs so Marshallese learn from an early age how infectious disease spreads.
6. Improve the supply and reliability of potable (drinkable) running water.
7. Distribute bleach and other cleaning supplies to improve sanitation of restrooms.
8. Improve garbage and waste management.

### **“Blue Lagoon”: A Market-based Model**

*Blue Lagoon* aims to attract foreign investment to provide jobs and U.S. dollars to raise the standard of living on the island, in this case by promoting tourism through subsidization of a new tourist hotel. As tourism rises, new jobs are created, thus tackling unemployment. The new foreign incomes enable hotel workers to purchase more imported goods. New wealth trickles down and increased economic activity on the island raises all boats.

1. Clear land on the northern tip of Ebeye for constructing a tourist area and hotel; offer tax credits to builder as an incentive. (Discussions already underway with Club Med, the Hilton, and the Sheraton)
2. Use portion of grant to train new workforce as wait staff, bartenders, housekeepers, and other tourist industry positions.
3. Use portion of grant to improve sewage and water. Secure contributions from hotel developer.
4. Expand the airport and ports on Kwajalein, advertise the Marshalls as a stopover for trans-Pacific travelers. (The islands are about halfway between Australia and Hawaii.)
5. Cultivate indigenous cultural traditions and sailing skills to perform for tourists and to serve as fishing and diving guides.
6. Require that hotel workers test free for tuberculosis, creating a strong incentive for workers to maintain clean home environments and practice good hygiene.

### **“Healthy Choices for a Healthy Ebeye”: A Behavioral Model**

*Healthy Choices* aims to improve health by encouraging Marshallese to make healthy behavioral choices. A public education and incentive campaign begins in the schools and extends through the churches and barbershops.

1. Train civic leaders as “health advocates”, promoting five to seven fruits and vegetables a day, diets low in saturated fat, exercise, sleeping eight hours each night.

2. Promote health messages via curriculum, lectures, and “chats” in schools, clinics, barbershops, and churches.
3. Encourage coughing into handkerchiefs.
4. Distribute low-fat recipe books and offer healthy cooking classes.
5. Organize support groups for those trying to stop smoking.
6. Distribute bleach and other cleaning supplies, along with pamphlets on their proper use.
7. Post signs near restrooms on the importance of proper hand-washing.
8. Build in financial incentives to family support payments and health insurance: Those who fail to maintain healthy behavioral practices will receive lower support payments and pay more for health insurance

**“Marshall Our Strength”: A Community Capacity-Building Model**

*Marshall Our Strength* aims to improve health by strengthening community-based organizations and increasing the participation of all Marshallese in decision-making. The core of the model lies in identifying local community leaders to work with the community advocate for programs that meet their needs and hold their government accountable. Community leaders will receive capacity-building training and stipends, and funding will be available for initial investment in projects as determined by the community. Suggested areas for investment:

1. Promote sustainable development built upon Marshallese assets, preserving valued traditions while welcoming innovation.
  - Launch a micro-credit bank to provide small loans to Marshallese entrepreneurs or those wishing to improve their housing.
  - Establish cooperatives for members to share equipment, marketing and training, and to facilitate in-kind trades of services
  - Invest in development a solar-films plant and employ Marshallese in installing solar panels to provide energy for the public grid.
2. Use the terms of the Missile Base’s lease to address Kwajalein / Ebeye segregation and Marshallese dependence on the base.
  - Build housing on Kwajalein for Marshallese workers; provide Marshallese citizens equal access to Kwajalein’s facilities.
  - Hire small boat operators to provide subsidized ferry service.
  - Remove U.S. military bans on use of nearby atolls, opening them to farming and housing.
3. Develop local food sources for improved nutrition and food security.
  - Limit large foreign fishing operations, instead managing a sustainable fishery for domestic consumption and export.
  - Restore traditional fishing practices and promote farming.
4. Invest in education, beginning with universal pre-school. Include curricula on cultural traditions, along with skills for the modern economy.

## Evaluating the Proposals

Consider the following questions and complete the grid for ALL the proposals:

1. Will everyone benefit equally from this plan? Who benefits? Who loses? What will its adoption mean for members of your group? Will it benefit some members of your group more than others?
2. Which interventions would be most effective? Sustainable? Which best address root causes? Which ones can be leveraged for future actions? Which carry the greatest risks?
3. Which proposal will have a more immediate impact? Which models would take a longer time?
4. How would the plan impact the relationship with the U.S. missile base on Kwajalein? How might the base influence the interventions?
5. What other resources need to be in place to maximize the interventions' effects? What allies need to be on board? Who will be opposed? What arguments might persuade opponents of the value of this proposal?

Select ONE proposal and develop compelling arguments to persuade the Nitijela to adopt your choice. You will have 5 minutes to present, and must divide up speaking time.

<b>PROPOSAL</b>	Winners and losers	Effectiveness and risks	Time span for results	Relationship with the base	Other needed resources
<i>Prescription for Health</i>					
<i>Blue Lagoon</i>					
<i>Healthy Choices</i>					
<i>Marshall our Strength</i>					

## ACTIVITY V: LOBBYING THE NITIJELA

1. Arrange the room to act as the parliament chambers of the Republic of the Marshall Islands. Members of the Nitijela should sit across the front of the room, perhaps with tables or a podium for those presenting, and the remaining seats arranged for observers.
2. Each Task Force is given five minutes to present their arguments and attempt to persuade members of the Nitijela to vote for their preferred proposal. Members of the Nitijela should question the Task Force presenters, as in a parliamentary hearing.
3. After all four Task Forces have made their arguments, members of the Health Worker and the Community Based Task Forces should be asked to leave the room (or sit quietly to the side). Members of the Missile Base and the Property and Business Owner Task Forces remain, along with the Nitijela members.  
The room is now “transformed” into the country club at the golf course on Kwajalein, where the Nitijela members are attending a private party sponsored by Raytheon Company and Marshallese land and business owners. (Members of the invited Task Forces should be advised ahead of time so they may bring food or other amenities to entertain the parliamentarians.) For the next ten minutes, those invited to the party can lobby the Nitijela for their preferred proposal. (Those excluded from the party might also be forewarned, and allowed to hold a protest well **outside** the “country club.”)
4. Provide the members of the Nitijela with a few minutes to discuss the proposals amongst themselves, while the Task Force members clean up after the “party” and return the room to the parliament chambers layout.
5. The excluded Task Forces may return to the parliamentary chambers. You or a student should act as the parliamentary clerk, performing a roll call vote on the proposals and declaring the winner.

### **Discussion and Reflection:**

Depending on the level and needs of your class, hold a class discussion or assign them to write their reflections on some of the following questions:

1. How did your Task Force work together? In the real world, what differences might exist between members of such a task force? Were the groupings/ alliances logical? Can you think of ways to find common ground within and between Task Forces?
2. What different forces and factors influence which policy proposals become laws? How does this differ across countries, or does it? What changes might level the playing field and deepen democracy?

3. Do you think the U.S. has a responsibility to improve living conditions on Ebeye? What do you think should be done? Who has the power to make changes?
4. Dr. Jim Yong Kim says, “We have more than enough resources to provide treatment, prevention, and to transform the economic and social conditions that give rise to the diseases of poverty like tuberculosis that are so prevalent today.” Why haven’t we done so? What factors make it difficult for the Marshallese government (or other poor countries) to make changes on its own?
5. Physician Neil Palafox says, “Poverty creates a dynamic in individuals where they feel they don’t control their lives or anything that occurs in their lives.” What kinds of policy changes might give the Marshallese a greater sense of control over their lives and/or increase the choices available to them in terms of work, residence, and health? Do you see a similar dynamic at work in poor communities in the United States?

## **EXTENSION ACTIVITIES**

### **Essay: Public health worker in Arkansas.**

Based on what they’ve learned, students develop their own proposal to address the unique health needs of the Marshallese who have relocated to Springdale, Arkansas.

### **Research: Investigate how a particular proposal became law in the United States**

One example might be the 1999 repeal of the Glass-Steagall Act, the law passed during the New Deal to restrict the investment activities of savings banks. See if you can discover where the idea for repeal originated. Who were the proponents? Who were the opponents? What tactics did the lobbyists on each side employ to influence undecided members of Congress? Alternatively, the class might investigate the activities of lobbyist Jack Abramoff, who went too far and was prosecuted for his lobbying practices.

### **Research: Modernization and Migration.**

Students investigate a rural-urban migration that occurred during 20<sup>th</sup> century and/or that continues today. Some possible examples are China or India during the 1990’s and early 2000’s, the American South post-WWII, and Mexico under NAFTA. Students should consider what changes destabilize regions and trigger the “push / pull” effect behind many large population migrations.

## ASSESSMENT

### **Writing:**

The writing assignments can be used to evaluate the student's comprehension of the readings and videos and their understanding of the non-medical factors that affect population health.

### **Oral Presentation:**

Group presentations may be used to evaluate their proficiency at developing logical and compelling persuasive arguments.

### **Group Work**

Students need to work together to gather information on the Marshall Islands, debate the policy options, develop their arguments, and make their presentations. Requesting feedback on the process may help you evaluate student proficiency at working in groups.

## NATIONAL EDUCATIONAL STANDARDS

### **Health Education:**

*American Association for Health Education,*

[http://www.aahperd.org/aahe/pdf\\_files/standards.pdf](http://www.aahperd.org/aahe/pdf_files/standards.pdf)

- 1.12.2 Describe the interrelationships of emotional, intellectual, physical, and social health
- 1.12.3 Analyze how environment and personal health are interrelated
- 1.12.5 Propose way to reduce or prevent injuries and health problems.
- 2.12.10 Analyze how public health policies and government regulations can influence health promotion and disease prevention.

### **Government**

*Center for Civic Education,* <http://www.civiced.org/index.php?page=912toc>

IV. What is the Relationship of the United States to Other Nations and to World Affairs?

C. How has the United States influenced other nations, and how have other nations influenced American politics and society?

### **English Language Arts:**

*American Library Association, American Association of School Librarians,*

[http://www.ala.org/ala/mgrps/divs/aasl/aasleducation/schoollibrarymed/ala-aasl\\_slms2003.pdf](http://www.ala.org/ala/mgrps/divs/aasl/aasleducation/schoollibrarymed/ala-aasl_slms2003.pdf)

### **Reading for Perspective**

Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire

new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment.

### **Participating in Society**

Participate as knowledgeable, reflective, creative and critical members of a variety of literacy communities.

### **Applying Language Skills**

Use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

### **Geography:**

*National Council for Geographic Education,*  
<http://www.ncge.org/i4a/pages/index.cfm?pageid=3314>

**Standard 1.** Understand how to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.

### **Social Studies:**

*National Council for the Social Studies,* <http://www.socialstudies.org/standards>

### **People, Places, and Environments**

- Analyze the processes, patterns and functions of human migration and settlement.
- Create, interpret and synthesize information from various representations of earth, such as maps, globes and satellite images.

### **Individual development and identity**

- Analyze group and institutional influences on people, events, and elements of culture in both historical and contemporary settings.
- Understand that many factors, both genetic and environmental (such as family, religion, gender, ethnicity, nationality, socio-economic status, communication, media and other influences), contribute to human development.

### **Individual, Groups, and Institutions**

- Understand the influence of individuals, groups and institutions on people and events in historical and contemporary settings.
- Understand how groups and institutions work to meet individual needs and promote the common good, and address persistent social issues.
- Be able to evaluate the influence of groups and institutions on people and events in historical and contemporary settings.

### **Global Connections**

- Understand that the solutions to global issue can be beyond the control of an individual nation and thus demand international negotiation.

- Understand that although global interdependence affects places across the globe unevenly, its effects are felt everywhere.

#### Civic Ideals and Practices

- Understand key issues past and present, civic ideals and practices involved, multiple perspectives represented in arriving at outcomes at different points in time, and current avenues for supporting progress toward more fully realizing democratic ideals.
- Understand the importance of becoming informed as the basis for thoughtful and positive contribution through civic action.
- Be able to identify assumptions, misconceptions, and bias in sources, evidence, and arguments used in presenting issues and positions.
- Be able to identify, seek, describe, and evaluate multiple points of view surrounding issues—noting the strengths, weaknesses, and the consequences associated with holding each position.
- Be able to evaluate the degree to which public policies and citizen behaviors reflect or foster the stated ideals of a democratic republican form of government.
- Be able to participate in persuading, compromising, debating, and negotiating in the resolution of conflicts and differences.

## APPENDIX A: BACKGROUND: TROUBLE IN PARADISE

Until recently, debates over health “disparities” were bounded by what’s been called an individual, bio-medical model that focuses almost exclusively upon the roles of health care, medical technologies (particularly drugs), and individual behaviors in shaping health outcomes.<sup>2</sup> In this lesson, students will examine a competing model for understanding health inequities: social determinants of health equity, or SDOHE. The SDOHE framework understands political and economic structures that advantage some while disadvantaging others to be a root cause of different health outcomes both within and between populations.<sup>3</sup> The example of the Marshall Islands illuminates how the social conditions that can make people healthy or sick do not arise “naturally,” but rather are driven by political decisions and economic arrangements that influence the allocation of resources within society.

The Republic of the Marshall Islands (RMI) consists of hundreds of small coral islands, or atolls, located almost exactly halfway between the U.S. and Australia. The inhabitants of these islands were once known as the “Navigators of the Pacific” because of their innovative use of astronomy and stick charts to travel by ocean canoe among islands spread across 750,000 square miles of ocean. Today, many of their seafaring skills and other cultural and economic traditions have been destroyed, and Ebeye, the nation’s second most populated island, is sometimes known by a less flattering moniker, “The Slum of the Pacific.”

### *U.S. Involvement in the Marshall Islands*

The lives and health of Marshall Islanders were disrupted dramatically after the United States invaded during WWII and drove out the occupying Japanese, then began using the outer islands as a nuclear test range after the war. Hundreds of Marshallese were moved off their home islands to make way for the testing. Between 1946 and 1958, the U.S. military detonated 67 nuclear weapons. Their combined power has been estimated as the equivalent of 1.7 Hiroshima blasts a day, every day, for 12 years.

In 1954, after a miscalculation on one of the largest H-bomb tests ever, code-named Bravo, extensive nuclear fallout landed on three inhabited Marshallese islands downwind of the test site. Not knowing what it was, children played in the white radioactive ash falling from the sky. Residents were treated, relocated, and finally tracked and studied by the U.S. military to learn about the effects of radiation exposure on humans.

Also in the 1950s, Marshallese citizens living on the territory’s second largest island, Kwajalein, were relocated to make way for the U.S. military to build what is now the Ronald Reagan Missile Base, a center of the U.S. anti-missile defense test system commonly known as Star Wars.

<sup>2</sup> Richard Hofrichter, “The Politics of Health Inequities: Contested Terrain” in *Health and Social Justice: Politics, Ideology, and Inequity in the Distribution of Disease*. ed. R. Hofrichter, 2003

<sup>3</sup> *Op Cit.* Hofrichter; *Closing the Gap in a Generation: Health equity through action on the social determinants of health*, WHO Commission on Social Determinants of Health, 2008.

Today, the missile base is managed by Raytheon Corp. About 2000 private American military contractors and their families live in a quaint suburban environment on Kwajalein with a modern hospital, social clubs, swimming pools, a golf course, and a tiny department store, dubbed Macy's. The Navy provides electricity and running water. Health outcomes here are not the world's best, but are comparable to those of middle-class American mainlanders.

About 1100 Marshallese also work on Kwajalein tending grounds, cleaning houses, fixing vehicles, unloading freight, preparing food, and performing other low-wage service jobs for the Americans.<sup>4</sup> But they're not allowed to live there. Marshallese employees must leave Kwajalein within two hours after their shifts end. They commute by ferry across the channel about three miles to and from Ebeye, a small island about a quarter-mile wide and half-mile long.

Only a few decades ago, Ebeye was home to about 500 Marshallese. Today, about 12,000 squeeze onto the island. Its population density is greater than Manhattan, but everyone on Ebeye lives on the ground floor. Migration to Ebeye is driven by a "push / pull effect" similar to that which drives many people in the Third World from the countryside to the cities. Globalization and U.S. military occupation have disrupted their traditional economy, diet, and culture, pushing them off their lands, while the lure of a job at the base on Kwajalein pulls them to Ebeye.

Today, the RMI has a 30 percent unemployment rate and its economy is dependent on U.S. government assistance.<sup>5</sup> The gulf between Kwajalein and the other Marshallese islands mirrors the uneven development that characterizes much of the so-called Third World.

### *Tuberculosis and Chronic Disease on the Islands*

Marshallese residents of Ebeye face the health threats of both the "developing" and industrialized worlds. Infectious diseases like tuberculosis, even cholera, flourish due to poverty, malnutrition, overcrowded housing, and squalid living conditions, including water shortages, power outages, and poor sanitation. Lack of economic opportunities and healthy food options, combined with the chronic stressors of poverty, dislocation, and cultural loss, also contributes to staggering levels of "modern" illnesses like diabetes, heart disease, hypertension, obesity, cancer, and suicide.

Tuberculosis provides a revealing case study of how poverty can get "under the skin" and render bodies more susceptible to illness. Public health experts estimate that one third of the earth's population, about two billion people, are infected by the bacterium that causes

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<sup>4</sup> JoAnn Wypijewski, "This Is Only a Test," *Harpers Magazine*, December 2001; p. 43

<sup>5</sup> Central Intelligence Agency, *The World Factbook*, <http://www.cia.gov/library/publications/the-world-factbook/geos/rm.html> (accessed April 16, 2009)

TB.<sup>6</sup> But most of those people will never become sick; their immune systems will hold the disease in check.<sup>7</sup>

However, about nine million people each year do become sick with the potentially deadly lung ailment,<sup>8</sup> usually because they live in conditions of poverty that compromise their immune systems and undermine their bodies' ability to fight off the disease.<sup>9</sup>

According to Dr. Jim Yong Kim, co-founder of Partners in Health, a leader of world efforts to eliminate TB, "What tuberculosis needs to flourish in a person's body is a broken down immune system. So just the stress itself of poverty can contribute to the likelihood of developing active tuberculosis... And there's nothing like malnourishment to decrease the immune response enough to let tuberculosis flourish."<sup>10</sup>

Conversely, improved living conditions can help protect communities against TB. At the turn of the 20<sup>th</sup> century, tuberculosis was the leading killer in many U.S. cities. But TB rates fell by 70% between 1900 and 1940, *before* antibiotics to treat the disease were invented.<sup>11</sup> What made the difference? Better housing and sanitation codes, along with social changes – like the eight hour workday, collective bargaining, social security, and universal high school – that enabled more people to share in the nation's growing wealth.<sup>12</sup> People's improved standards of living strengthened their bodies' immune systems. In fact, Richard Hofrichter, senior policy analyst for the National Association of County and City Health Officials (NACCHO), refers to social and economic policies that improve people's living conditions and participation in political decisions as our "social immune system."

Living conditions on Ebeye are ideal for the spread of tuberculosis. TB rates on the island are 220 per 100,000 people (compared to 4 per 100,000 in the United States).<sup>13</sup> To successfully cure TB in an individual requires that the patient carefully complete a full course of treatment on schedule, taking up to four different drugs each day for six

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<sup>6</sup> World Health Organization, "Fact Sheet No. 104," <http://www.who.int/mediacentre/factsheets/fs104/en/index.html>, (accessed April 16, 2009)

<sup>7</sup> Email verification from Norman H Edelman, Chief Medical Officer, American Lung Association, 12.10.07; Email verification from Glenn Thomas, Communications Officer, WHO Stop TB Dept, 12.12.07

<sup>8</sup> *Op Cit.* World Health Organization, "Fact Sheet No. 104,"

<sup>9</sup> Interview with Dr. Jim Kim for *UNNATURAL CAUSES*, 2007; "Addressing Poverty in TB Control," WHO, 2005; "The world-wide increase in tuberculosis: how demographic, HIV infection and increasing numbers in poverty are increasing tuberculosis," Peter DO Davies, *Annals of Medicine*, Vol 35, Issue 4 June 2003; Tuberculosis Risk Factors, The Mayo Clinic, <http://www.mayoclinic.com/health/tuberculosis/DS00372/DSECTION=risk-factors> (accessed April 16, 2007)

<sup>10</sup> *Op Cit.* Tuberculosis Risk Factors, The Mayo Clinic; *Op Cit.* World Health Organization, "Fact Sheet No. 104"; Bone, Angie et al., "Stop TB: Guidelines for Social Mobilization," WHO, 2001

<sup>11</sup> Interview with Dr. Jim Kim for *UNNATURAL CAUSES*, 2007

<sup>12</sup> Bone, Angie et al., "Stop TB: Guidelines for Social Mobilization," WHO, 2001; "Combating Tuberculosis and Homelessness: Recommendations," National Health Care for the Homeless Council, <http://www.nhchc.org/Publications/Tuberculosis.pdf>

<sup>13</sup> WHO Core Health Indicators, [http://www.who.int/whosis/database/core/core\\_select\\_process.cfm?countries=mhl&indicators=TBIncidenceRate&indicators=TBPrevRate](http://www.who.int/whosis/database/core/core_select_process.cfm?countries=mhl&indicators=TBIncidenceRate&indicators=TBPrevRate) (accessed April 16, 2009)

months.<sup>14</sup> If patients fail to complete their drug regimen, the TB bacillus can mutate and the disease can return in a multiple-drug-resistant form (MDR-TB) – far more dangerous.<sup>15</sup> Every day, public health workers drive the streets of Ebeye tracking their patients to ensure that they complete their course of medications.

### *A 'Special and Strategic' Relationship*

In 1986, the U.S. Congress ratified the Compact of Free Association which granted the Marshall Islands independence and financial assistance as compensation for the atom bomb tests and the continued leasing of Kwajalein to the U.S. military for its missile base. The Compact also granted Marshallese citizens the right to travel and live freely within the U.S. in recognition of this “special and strategic relationship” between the two nations.

Now another migration has begun. Unable to live off the land or find employment in their own nation, many Marshallese have relocated to the unlikely destination of Springdale, Arkansas, where up to 10,000 now live (the exact count is unknown). Many work low-wage jobs at Tyson Foods and other food processing plants in the area. Most are happy to escape the poverty of home, but the adjustment hasn't been easy.

Marshallese living in the U.S. have lower rates of tuberculosis than those at home, but their bodies can't escape the toll a lifetime of poverty. Add to this history the new stressors of an unfamiliar environment and long working hours, and the rates of tuberculosis among Marshallese in Arkansas are still more than 10 times the U.S. average.<sup>16</sup>

The U.S. relationship with the Marshall Islands has shaped the islanders' fates during the past 60 years, and will inevitably shape their prospects for better lives – and health – in the future. This lesson encourages students to look beyond medicines, genes, and individual behaviors to the underlying socio-economic and political factors that produce inequitable health outcomes.

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<sup>14</sup> “Treatment of Tuberculosis,” American Thoracic Society, CDC, and Infectious Diseases Society of America, 52 (RR11); 1-77, 6/20/03

<sup>15</sup> -“Multi-Resistant Tuberculosis (MDR TB), CDC Fact Sheet, January 2007; “Tuberculosis, Drug- and multidrug-resistant tuberculosis (MDR-TB),” World Health Organization; “Modern Menace: Emerging & Re-Emerging Infectious Diseases,” Health Media Lab

<sup>16</sup> Laura Kellams, “Lawmakers: Islanders Need Medical Care,” Arkansas Democrat-Gazette, December 11, 2007, [www.newanews.com/adg/News/21038/](http://www.newanews.com/adg/News/21038/)

## **APPENDIX B: CONCEPT STATEMENT SAMPLE RESPONSES**

### **1. Health is more than healthcare**

Doctors treat us when we're ill, but health care (which some call "sick care") has little to do with what makes us healthy or sick in the first place. Research shows that social conditions – the jobs we do, the money we're paid, the schools we attend, the neighborhoods we live in, the power we have to manage the factors that impact our lives – are as important to our health as our genes, our behaviors, and even our medical care. Furthermore, although 47 million Americans lack health insurance, research shows that no more than 10–20% of health inequalities can be attributed to unequal access and medical treatment. Clearly, other factors play a much larger role.

### **2. Wealth equals health**

The single strongest predictor of our health is our position on the class pyramid, from the top all the way to the bottom. Whether the ranking is measured by income, schooling, or occupation, those at the top have the most power and resources and on average live longer and healthier lives. Those at the bottom are most disempowered, get sicker, and die younger. The rest of us fall somewhere in between. On average, middle-status people are almost twice as likely to die an early death as those at the top; those with the lowest status are four times as likely. Among people who smoke, poor smokers have a greater risk of dying early than rich smokers.

### **3. Racism imposes an additional health burden**

Past and present discrimination in housing, jobs, and education means that today people of color are more likely to be lower on the class ladder. But even at the same "rung," African Americans typically have worse health and die sooner than their white counterparts. In many cases, so do other populations of color. Segregation, social exclusion, encounters with prejudice, one's degree of hope and optimism, differential access to and treatment by the health care system – all of these things can impact health. Interestingly, new Latino and African immigrants on average have better health than the average American despite usually being poorer. But the longer they are here, the more their health advantage erodes.

### **4. The personal health choices we make are constrained by the choices we have**

Individual behaviors – smoking, diet, drinking, and exercise – matter for health. But making healthy choices isn't just about self-discipline. Some neighborhoods have easy access to fresh, affordable produce; others have only fast food joints, liquor and convenience stores. Some have nice homes, clean parks, safe places to walk, jog, bike or play, and well-financed schools offering gym, art, music and after-school programs; some don't. And many health threats have nothing to do with choice at all, such as environmental exposure to pollution and toxics. Land use policies and public and private investment decisions can better ensure healthy spaces and places for everyone.

## **5. High demand / low control lives (and jobs) can be toxic**

There's a difference between pressure and stress. We all face pressure. But how much those pressures trigger the body's stress response (the flood of hormones like cortisol and adrenaline that put the body "on alert" by increasing heart rate, raising blood pressure, and increasing glucose in the bloodstream) depends on both the pressures faced and whether we have access to the resources needed to manage those pressures. The lower we are in the pecking order, the greater our exposure to forces that can upset our lives – unstable and low-paying jobs, uncontrolled debt, capricious supervisors, unreliable transportation, poor childcare, lack of healthcare, noisy and violent living conditions – and the less access we have to the money, power, knowledge and social connections that can help us cope and gain control over those forces. And when stressors are constant and unrelenting – over days, weeks, even years – our stress systems don't return to normal. Like gunning the engine of a car, this constant state of arousal, even if low-level, wears our bodies down over time, increasing our risk for disease. This relationship between demand and control helps explain why, contrary to stereotype, it's not CEOs who are dropping dead of heart attacks but their subordinates.

## **6. Inequality is bad for our health**

The United States has by far the most inequality in the industrialized world – and the worst health. The top 1 percent now owns as much wealth as the bottom 90 percent. Tax breaks for the rich, deregulation, the decline of unions, racism and segregation, outsourcing and globalization, and cuts in social programs destabilize communities and channel wealth and power – and health – to the few at the expense of the many. Economic inequality in the U.S. is now greater than at any time since the 1920s. Americans' life expectancy and infant mortality rates have fallen to 29th in the world. Countries much economically poorer than ours do better.

## **7. Social policy is health policy**

Average life expectancy in the U.S. improved by 30 years during the 20th century. Researchers attribute much of that increase not to drugs or medical technologies but to social changes – for example, improved wage and work standards, universal schooling, improved sanitation and housing, and civil rights laws. Social policy measures like living wages, paid sick and family leave, guaranteed vacations, universal preschool and access to college, and universal health care can further extend our lifespans by improving our lives. These policies are as much health issues as diet, smoking, and exercise.