ENVIRONMENTAL CHANGE AND EMERGING PANDEMICS

FEBRUARY 26, 2015
Thursday, February 26, 2015
3– 4:30 p.m.
Museum of Northern Arizona
Facilitated by: Dr. Jeff Downard, NAU Department of Philosophy

AGENDA

3:00 p.m
Welcome and Introduction
Ms. Andrea Houchard, Director, Philosophy in the Public Interest

3:15 p.m.
Community Discussion
Dr. Jeff Downard, NAU Department of Philosophy

1) How do concerns about Ebola differ depending on the perspective from which it is viewed? (P3-6)
2) How should we balance the concerns from different perspectives, especially in light of the ideals of a free, democratic society? (P7)
3) Should we view pandemics as nature taking its course? Why or why not? And what do our answers to these questions say about our place in the environment? (P8)

4:20 p.m.
Closing Questions and Recap of Discussion
Community Committee (P9)

Special thanks to our partners, supporters and venue hosts!
1) How do concerns about Ebola differ depending on the perspective from which it is viewed? What are the relevant facts from these perspectives?

**AVERAGE U.S. CITIZEN**

*Concerns:*
In October 2014, the Washington Post published a poll on American’s concerns about the Ebola epidemic. Below are the results of the poll:

**On some other issues, how do you feel about the possibility that you or someone in your immediate family might catch the Ebola virus?**

43% of Americans are very or somewhat worried about the possibility that someone in their immediate family might catch the Ebola virus, while 57% are not too worried or not worried at all.

**Apart from you and your family, how concerned are you about the possibility of a widespread Ebola epidemic occurring in the United States?**

65% of Americans are very or somewhat concerned about a possible widespread Ebola epidemic occurring in the United States while 35% are not so concerned or not concerned at all.

**How confident are you in the federal government’s ability to respond effectively to an outbreak of the Ebola virus in the United States?**

62% of Americans were very or somewhat confident in the government’s ability to respond effectively to an outbreak of the Ebola virus in the United States, while 37% were not so confident.

**Do you think the United States is doing all it reasonably can do to try to prevent further cases of Ebola in the United States, or do you think it should do more?**

33% of Americans said the U.S. is doing all it can do to prevent further cases of Ebola in the U.S. while 64% said the U.S. should do more.

*Relevant facts:*
In the U.S. there have been four cases of Ebola.
- **September 30, 2014:** A man who had traveled from Liberia to Dallas, Texas was the first confirmed case of Ebola to be diagnosed in the United States. He passed away on October 8.
- **October 10, 2014:** A health care worker who treated the aforementioned patient tested positive for Ebola. The worker has since recovered.
- **October 15, 2014:** The second healthcare worker who provided care for the patient tested positive for Ebola. The worker has also since recovered.
- **October 23, 2014:** A medical aid worker who had returned to New York City from Guinea serving with Doctors Without Borders was tested positive for Ebola. The worker has since recovered.
EBOLA PATIENT IN AFRICA

Concerns:
Sandra Smiley from The Telegraph writes “a climate of fear, mixed with a poor understanding of the virus, has created optimal conditions for its spread in West Africa. People do not necessarily recognize the signs and symptoms...they do not take precautions to avoid exposing themselves to the disease [or] fail to report it.”

Many patients who have contracted Ebola are likely to die. However, there are still survivors in the afflicted countries of Guinea, Sierra Leon and Liberia. Even so, a person may continue to live with the social stigma of having contracted Ebola. Mariam from Conakry, Guinea gives her story

“There were at least two weeks where I didn’t go out at all...at a certain point, I thought, if people are going to avoid me, I’m going to avoid them too. I reasoned that if I tried to get close to someone and they pushed me away, that’d really hurt.”

- Mariam, from Conakry, Guinea

She now works with other victims and families of those afflicted with Ebola to help them get by in these trying times: “Things will never be as they were before...but I feel fine in my new life. It’s because of ignorance and lack of information that my family suffered such a loss. If I can save other families from the same, I feel proud to be doing it.”

Relevant facts:
- Symptoms include fever, severe headache, muscle pain, weakness, fatigue, diarrhea, vomiting, abdominal pain, unexplained bleeding, bruising, and death.
- Symptoms become apparent on average between 8-10 days after exposure to the virus.
- To catch the virus, an individual must come in contact with an infected person’s bodily fluids, contaminated objects, or carrier animals (fruit bats and monkeys).
- Currently, there is no cure for Ebola. Recovery from the virus depends on the clinical care one receives and the individual’s immune response.

Graph from: http://www.economist.com/blogs/graphicdetail/2015/02/ebola-graphics
HEALTH CARE WORKER

Concerns:
Some health care workers believe it is their obligation to care for U.S. citizens who become infected. Susan Mitchell Grant, chief nurse for Emory University Hospital in Atlanta, Georgia, states “we are caring for these patients because it’s the right thing to do.”

By treating Ebola within the United States, health care workers can become more knowledgeable of the virus itself as well as how to treat it. Nurse Grant explains: “Ebola won’t become a threat to the general public from their presence in our facility…but the insight we gain by caring for them will prepare us to better treat emergent diseases that may confront the United States in the future.”

Relevant facts:
Health care workers in the U.S. have protocols they must follow when dealing with infection control. The Centers for Disease Control and Prevention (CDC) has tightened previous protocols for healthcare workers caring for Ebola patients.
- All health care workers undergo rigorous training and are practiced and competent with PPE (personal protective equipment), including putting it on and taking it off in a systemic manner
- No skin exposure when PPE is worn
- All workers are supervised by a trained monitor who watches each worker putting PPE on and taking it off

U.S. PUBLIC HEALTH ADMINISTRATOR

Concerns:
Even at the height of the outbreak, the World Health Organization advised against a full travel ban to countries in West Africa. They said such a ban “could complicate efforts to send in medical personnel and supplies where they are needed most and could also drive patients under ground, making it even harder to halt the virus’ speed.”

In October 2014, Stephen Dinan from the Washington Times wrote, “[T]he State Department has quietly made plans to bring Ebola-infected doctors and medical aides to the U.S. for treatment.” Deputy director of the office of international health and biodefense, Robert Sorenson, says “The United States needs to show leadership and act as we are asking others to act by admitting certain non-citizens into the country for medical treatment for Ebola Virus Disease (EVD) during the Ebola crisis.”

Relevant facts:
- The U.S. has responded to Ebola by tightening travel restrictions to Guinea, Sierra Leone, and Liberia in an effort to keep the disease from spreading.
- In October, 2014 the LA Times reported that “there are no direct flights from the three West Africa nations into the U.S., and screening for fever and other passenger checks began last week at the five international airports: John F. Kennedy in New York, Newark Liberty in New Jersey, Washington Dulles, Chicago O’Hare, and Hartsfield-Jackson in Atlanta.”
- These measures were taken as a means to prevent the disease from spreading but not restricting the ability of the U.S. to provide aid to those in West Africa.
**POLITICIAN**

**Concerns:**
- While politicians may be concerned with the wellbeing of people around the world, they must balance these concerns against those of their constituents at home.
- Amid the outbreak, White House spokesman Josh Earnest said, “You are seeing put in place measures that are intended to protect the American public.”

**Relevant facts:**
- Responding to fears among citizens of their states in July 2014, Governors of New York and New Jersey instituted mandatory quarantines for medical workers returning from West Africa.
- The governor of Illinois ordered a 21-day quarantine for high-risk individuals.
- Federal, state and local officials identified hospitals in Nebraska, Montana, Maryland and Georgia as Ebola treatment centers. However, all these hospitals combined can hold only 9 Ebola patients at one time.
2) How should we balance the concerns from different perspectives, especially in light of the ideals of a free, democratic society?

Given the range of concerns and perspectives discussed above, it is plausible that not everyone would advocate for the same responses to pandemics. The average U.S. citizen and Ebola patients in Africa may have many but not all of the same concerns. Public health officials and politicians may have different goals.

Globally, the Ebola pandemic raises issues about human rights and equality, two core democratic values.

- Alicia Yamin writes in *Open Democracy* that “the Ebola crisis shows the necessity of a human rights approach to public health that focuses on discrimination and accountability, and the crisis itself has been driven by deep inequities in access to basic rights and a legacy of conflict and mass human rights abuse.”
- The World Health Organization recommends a minimum of 23 healthcare workers per 10,000 people. In Sierra Leone, there were just 0.2 physicians and 1.7 nurse/midwives per 10,000 people.

Domestically, the Ebola pandemic raises human rights issues in further ways.

- Kaci Hickox is an American nurse who treated Ebola patients in Sierra Leone in late 2014. When she returned to the U.S., she was held in a mandatory 21-day quarantine, despite twice testing negative for Ebola and showing no symptoms. Hickox told CNN, “This is an extreme that is really unacceptable, and I feel like my basic human rights have been violated.”
- Some saw this as a necessary sacrifice of liberty to ensure the others’ safety. Others saw it as overreaction.
- The CDC argued that healthcare workers without symptoms should be allowed to monitor their own temperature and symptoms upon returning home, on the condition that they notify officials immediately if begin to show symptoms of the virus.
3) Should we view pandemics as nature taking its course? Why or why not? And what do our answers to these questions say about our place in the environment?

Most of the discussion of pandemics takes for granted that they are bad and should be avoided if possible.

However, one can also view pandemics as nature taking its course. Some ecologists have argued that pandemics such as Ebola are natural processes and that they are inevitable, especially given current human population levels. For example, the biologist Eric Pianka writes,

“Humans have overpopulated the Earth and in the process have created an ideal nutritional substrate on which bacteria and viruses (microbes) will grow and prosper. We are behaving like bacteria growing on an agar plate, flourishing until natural limits are reached or until another microbe colonizes and takes over, using them as their resource...I believe it is only a matter of time until microbes once again assert control over our population, since we are unwilling to control it ourselves.”

Do pandemics have good qualities and consequences or are they bad through and through? What senses of ‘good’ and ‘bad’ are worth considering when addressing such questions? If they have some good qualities or consequences, how, if at all, should those influence our attitudes toward pandemics?

Disease mortality rate compared

<table>
<thead>
<tr>
<th>Disease</th>
<th>Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most flus</td>
<td>0.1%</td>
</tr>
<tr>
<td>Spanish flu</td>
<td>2.5%</td>
</tr>
<tr>
<td>Plague</td>
<td>10% (with antibiotics)</td>
</tr>
<tr>
<td>Polio</td>
<td>5% in children, up to 30% in adults</td>
</tr>
<tr>
<td>Smallpox</td>
<td>30%</td>
</tr>
<tr>
<td>Bird flu</td>
<td>60%</td>
</tr>
<tr>
<td>Current Ebola outbreak</td>
<td>60-70%</td>
</tr>
<tr>
<td>The Marburg virus</td>
<td>90%</td>
</tr>
<tr>
<td>Rabies</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: CDC, WHO

Graph from: http://www.bbc.com/news/health-29953765
The “hot topics” in the Hot Topics Cafés are nominated and selected by community members that represent diverse constituencies and viewpoints. We thank our committee for their participation. *Voted on Spring, 2015 “Hot Topics.”

Flagstaff

Frankie Beesley, Program Coordinator, Friends of Flagstaff’s Future
*Joe Boles, Professor Emeritus, NAU College of Arts and Letters
*Jean Malecki-Friedland, MD, MPH; County Director and Chief Medical Professor and Chair, Preventive Medicine and Public Health, Miami Miller School of Medicine; Co-Founder: The Compassion Project
Jacque Gencarelle, Northern Arizona Behavioral Health Association
*Barbara Hickman, Superintendent, Flagstaff Unified School District
Sherman Stephens, Flagstaff Community
Craig Van Slyke, Dean, The W.A. Franke College of Business
*Sandy Moriarty, Sedona Mayor
Tom O’Halleran, Keep Sedona Beautiful; Board Member, Verde River Basin Partnership
*Judy Reddington, Arts and Letters Advisory Council, NAU; Board Member, Museum of Northern Arizona; Board Director, Sedona International Film Festival
*Steve Segner, Owner, El Portal; Chair, Lodging Council, Sedona Chamber of Commerce
Patricia Lowell, Sedona Public Library, proxy for: Virginia Volkman, Director, Sedona Public Library
Jessica Williamson, Sedona City Council

Sedona & the Verde Valley

*Karen Daines, Assistant City Manager, Sedona
Paul Friedman, Sedona Citizens for Civil Dialogue
*Kate Hawkes, Producing Artistic Director, Red Earth Theatre
Darrin Karuzas, Principal, Sedona Red Rock High School
*Judy Reddington, Arts and Letters Advisory Council, NAU; Board Member, Museum of Northern Arizona; Board Director, Sedona International Film Festival
*Steve Segner, Owner, El Portal; Chair, Lodging Council, Sedona Chamber of Commerce
*Judy Reddington, Arts and Letters Advisory Council, NAU; Board Member, Museum of Northern Arizona; Board Director, Sedona International Film Festival
*Steve Segner, Owner, El Portal; Chair, Lodging Council, Sedona Chamber of Commerce
Patricia Lowell, Sedona Public Library, proxy for: Virginia Volkman, Director, Sedona Public Library
Jessica Williamson, Sedona City Council

Ex officio

Andrea Houchard, NAU Philosophy in the Public Interest
Jona Vance, NAU Department of Philosophy
Robin Weeks, Osher Lifelong Learning Institute, Yavapai College, Sedona Center
Randy Wilson, Arizona Daily Sun

NAU’s Philosophy in the Public Interest is non partisan and does not endorse any position with respect to the issues we discuss. Philosophy in the Public Interest is a neutral convener for civil discourse.

Sources

http://www.cdc.gov/media/releases/2014/fs1020_n_5663317.html
http://www.latimes.com/nation/la-na-ebola-air-20141022-story.html#page=1
http://mashable.com/2014/10/16/ebola-us-hospital-capacity/
http://en.wikipedia.org/wiki/ebola-virus
http://www.bbc.com/Politics/Polling/release_366.xml
http://en.wikipedia.org/wiki/ebola-virus
http://www.economist.com/blogs/graphicdetail/2015/02/ebola-graphics
http://www.latimes.com/nation/la-na-ebola-air-20141022-story.html#page=1
http://mashable.com/2014/10/16/ebola-us-hospital-capacity/
http://en.wikipedia.org/wiki/ebola-virus
http://www.bbc.com/Politics/Polling/release_366.xml
http://www.economist.com/blogs/graphicdetail/2015/02/ebola-graphics
http://www.latimes.com/nation/la-na-ebola-air-20141022-story.html#page=1
http://mashable.com/2014/10/16/ebola-us-hospital-capacity/
http://en.wikipedia.org/wiki/ebola-virus
http://www.bbc.com/Politics/Polling/release_366.xml
http://www.economist.com/blogs/graphicdetail/2015/02/ebola-graphics
http://www.latimes.com/nation/la-na-ebola-air-20141022-story.html#page=1
http://mashable.com/2014/10/16/ebola-us-hospital-capacity/
http://en.wikipedia.org/wiki/ebola-virus
http://www.bbc.com/Politics/Polling/release_366.xml
http://www.economist.com/blogs/graphicdetail/2015/02/ebola-graphics
http://www.latimes.com/nation/la-na-ebola-air-20141022-story.html#page=1
http://mashable.com/2014/10/16/ebola-us-hospital-capacity/
http://en.wikipedia.org/wiki/ebola-virus
http://www.bbc.com/Politics/Polling/release_366.xml
http://www.economist.com/blogs/graphicdetail/2015/02/ebola-graphics
http://www.latimes.com/nation/la-na-ebola-air-20141022-story.html#page=1
http://mashable.com/2014/10/16/ebola-us-hospital-capacity/
http://en.wikipedia.org/wiki/ebola-virus
http://www.bbc.com/Politics/Polling/release_366.xml
http://www.economist.com/blogs/graphicdetail/2015/02/ebola-graphics
Wednesday, March 4
6 - 7:30 p.m.
Museum of Northern Arizona
NOTES: