



Zombie Apocalypse Fantasies: Preparing for Disaster

Allen R. Dyer, MD, PhD

Professor of Psychiatry and Behavioral Sciences

The George Washington University

<http://faculty.etsu.edu/dyer>

<http://willowcliff.wordpress.com>

adyer@mfa.gwu.edu

Dr. Gathi Abraham

Dr. Stephanie Cho

Dr. Ross Goodwin

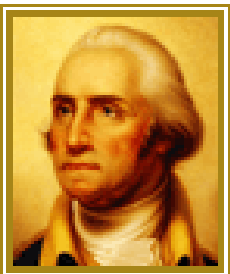
Dr. Sally He

Dr. Linda Ojo

Dr. Stephani Reinhold

Dr. Bruce Shaver

Dr. Karen Wooten

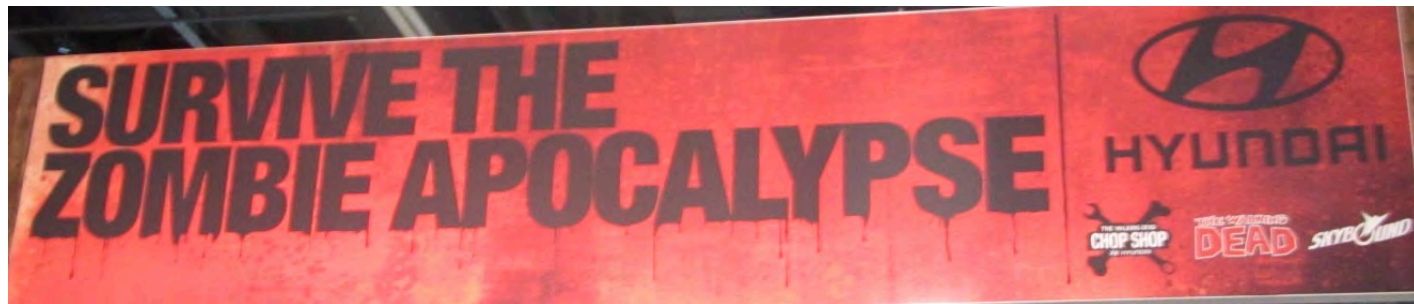


THE GEORGE
WASHINGTON
UNIVERSITY

WASHINGTON DC

My 21st century patients: zombie apocalypse fantasies

- Bill, 32, a chemist – writing a book on how to re-create the classic experiments of Koch, Pasteur
- Brian, 23, a student – hard to imagine a future in which he has a meaningful role, students play zombie vs. human strategy games.
- Jeff, 27, an Iraq veteran – lives with anger, violence and loneliness and a perpetual sense of injustice. People at work are becoming like zombies. The work is routine, they are so slow, they just sit at their desks for years. I am afraid their mindlessness will infect me. Even the new people are beginning to sound like zombies, Key phrases: ‘flesh this out, flesh this out, flesh this out’ It makes me sick. This is the century for women – strength doesn’t mean shit anymore.”
- Amanda, 55, a nurse with bipolar disorder, stays up after her night shifts, feels like a zombie, as a way of avoiding being present. Gets cranky and enjoys it. “Being a zombie is like a drug or drinking – it gets me out of myself – I am not really here, can be irresponsible. Gives me an excuse to be antisocial.”
- Sam, 48, 10 years ago I told my girlfriend, I am already dead.
- Gerald, 26 y o law student, developed tort scenarios for dealing with zombies.
(GW law school tests students on their preparation to deal with the aftermath of zombie attacks)



Vegan food is zombie proof



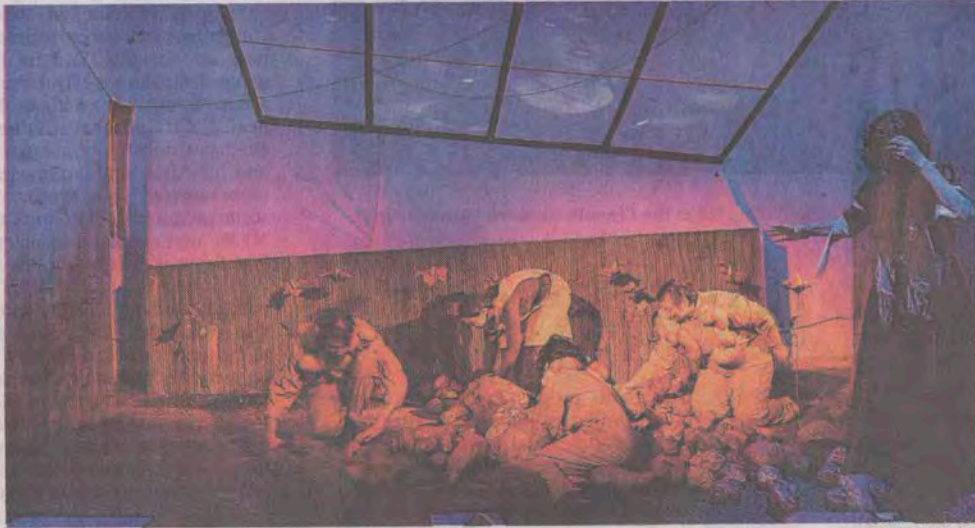


“Like any good zombie,
horror keeps coming back.”

Washington Post, October 10, 2014



Washington Post, October 15, 2014



EMILIA PENNANEN

In "Potatoes of August" at EMP Collective in Baltimore, dangerous spuds try to spark a revolution.

No God, a zombie apocalypse — and taters!

BY NELSON PRESSLEY

Baltimore: where the theater is


tive is a droll sci-fi fantasy about humanity in a rut and a brainy breed of spuds ready to run things. The pota-

Director Evan Moritz's cast handles the absurdity of Sibyl Kempson's quirky, talky drama more effectively than the steaming helpings of intel-

"Social Creatures" (by Jackie Sibblies Drury) shows a group devouring itself. A self-appointed leader tries to enforce civility in the face of extreme hardship — food is scarce and zombies are lurking — but this little band of humanity just can't get its act together.

Theories of
**INTERNATIONAL
POLITICS AND
ZOMBIES**

Daniel W. Drezner



POPULAR AND SCHOLARLY INTEREST IN ZOMBIES

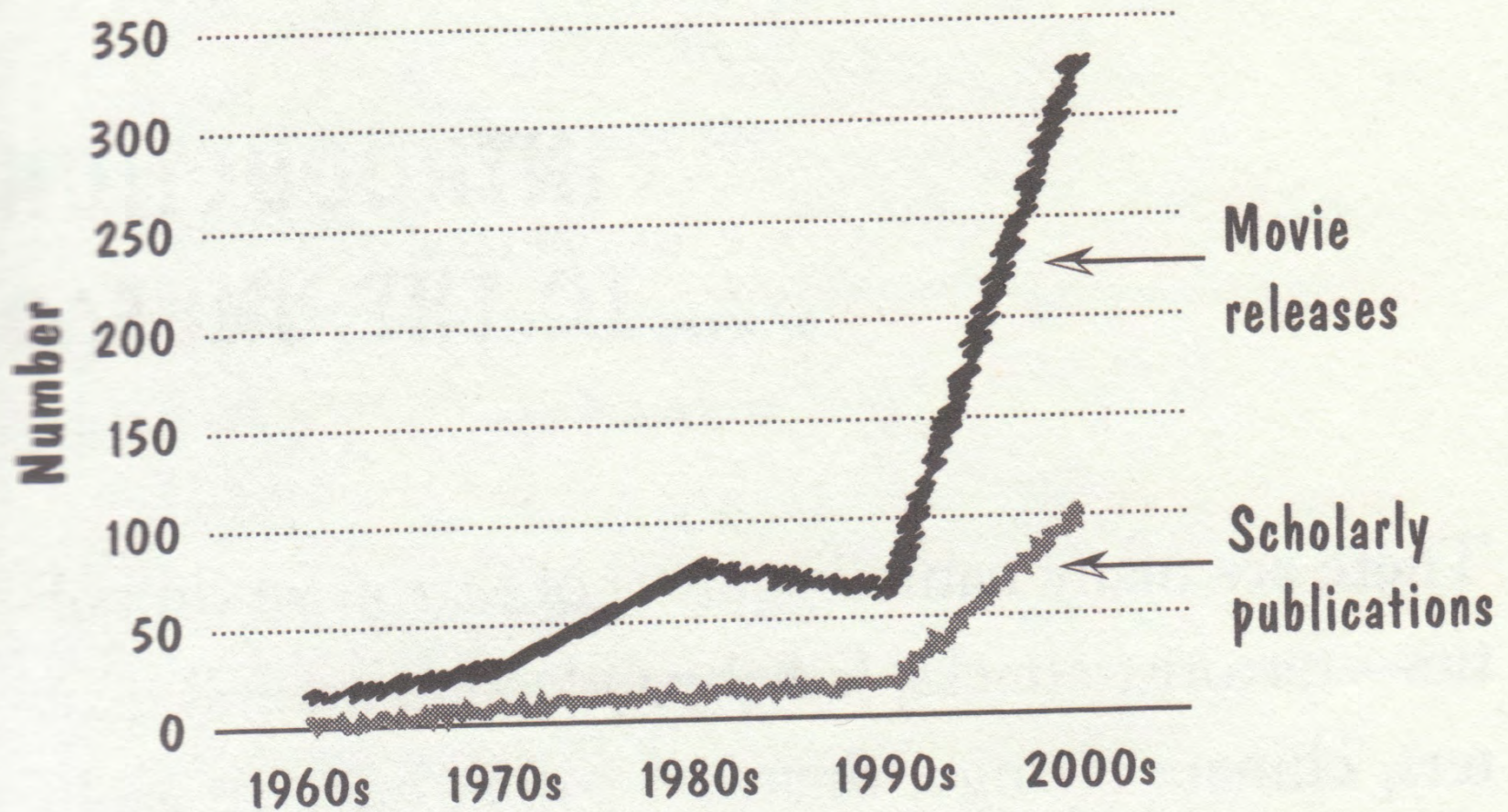


Figure 1. Popular and scholarly interest in zombies.
Sources: Wikipedia, Web of Science.

INTEREST IN ZOMBIES SINCE 2000

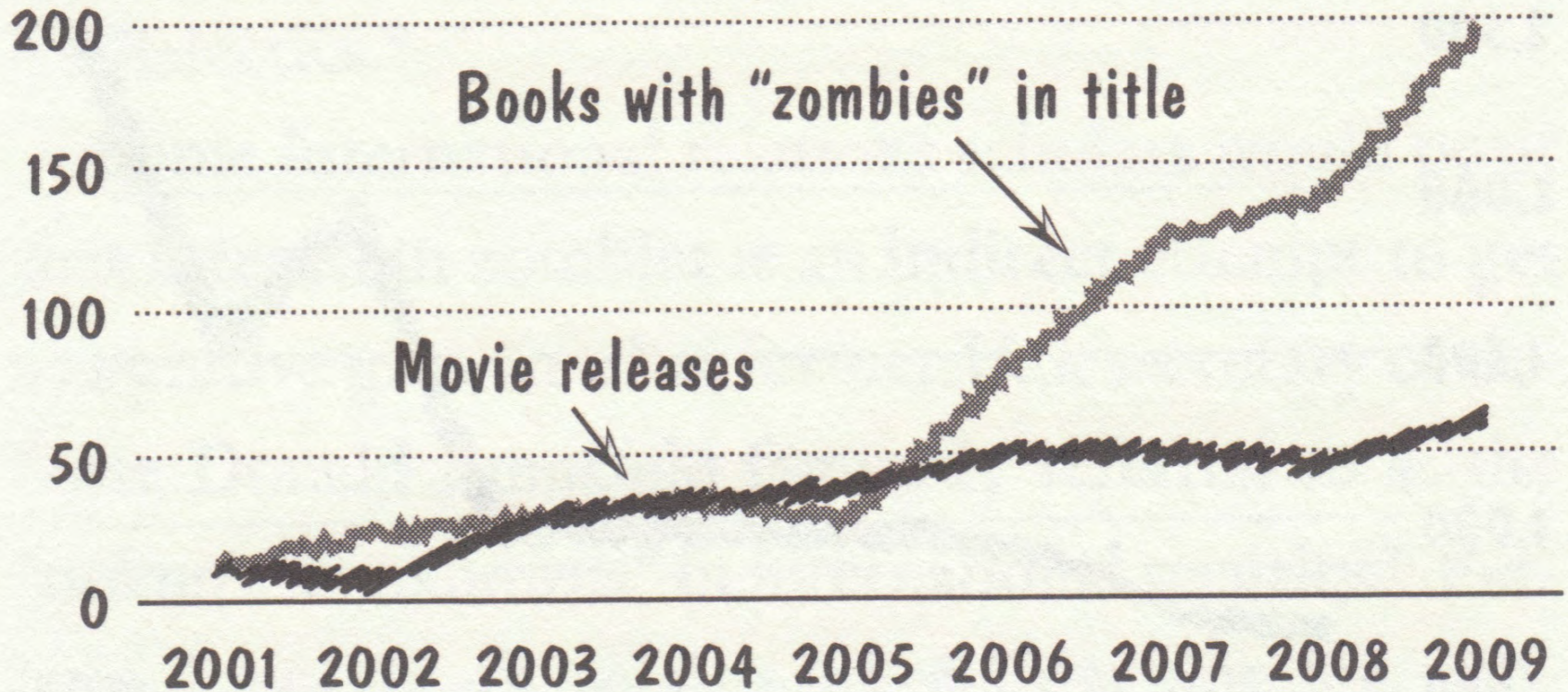


Figure 2. Interest in zombies since 2000.
Sources: Amazon.com, Wikipedia.

Learning objectives


- 1. Prepare physicians to be **leaders** in a global /public (mental) health system.
- 2. To discuss the **complexity** of health and healthcare and the role of physicians in policy formation
- 3. To apply principles of **EBP**
 - Evidence-based practice - understand patients' communication
 - Evidence-based policy – disaster preparedness
- 4. to be able to answer the question:
what do we accept as **evidence**?

Global Mental Health and Public Policy

CONGRATULATIONS!!!!

The medical and public health communities
now you were right all along!!



- 
- Serious mental illness and substance abuse is a major determinant of population health
 - Dual diagnoses, mental and behavioral health issues are at the core of many/most chronic diseases
 - Proactive integration of psychiatric, mental health and behavioral health diagnosis, treatment and prevention are required to achieve the triple aim: improve quality, improve patient satisfaction, improve efficiency

Lawrence Deyton, MSHP, MD:
Psychiatry, Community MH, and Clinical Public
Health

21st century Educational Strategy: FLIPPED CURRICULUM

- Active learning > passive lectures
- Team-based and interactive
- **STOP – TALK – SHARE** q 15 minutes

Health = “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”

World Health Organization

Figure 1
Components of Health

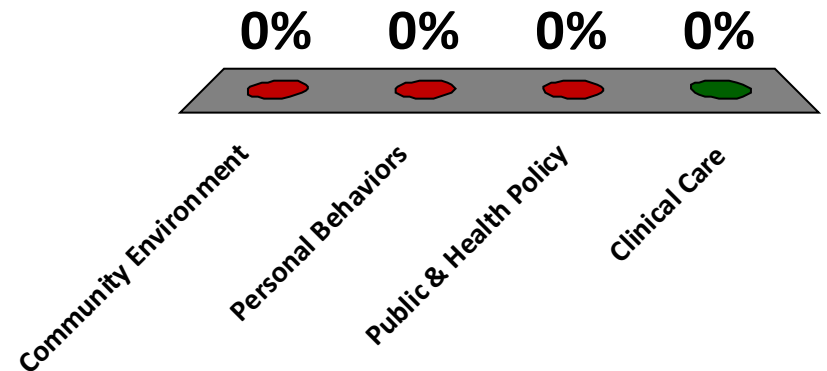


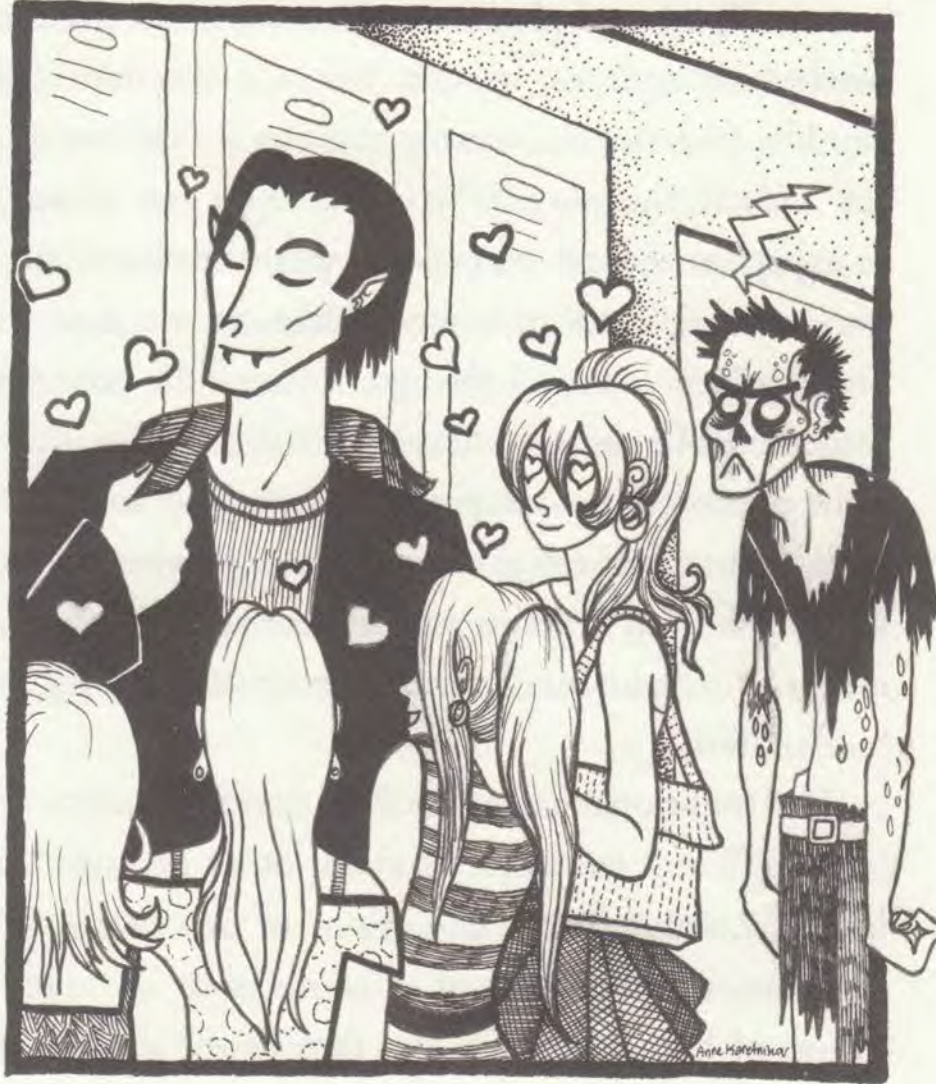
Which of these factors has the **LEAST** impact on Health Outcome?

Figure 1
Components of Health



- A. Community Environment
- B. Personal Behaviors
- C. Public & Health Policy
- D. **Clinical Care**





Zombies, in contrast to vampires, do not thrive in high schools.

“I happen to like vampires
more than zombies.”

Martin Scorsese

Question: What is a zombie?

HOW ZOMBIFICATION HAPPENS

There are many ways one can become a zombie. While infection with a deadly plague is most traditional, the zombie apocalypse may come in a number of ways. Remember, no matter how you were zombified, you can always infect others with a simple bite or maybe even by spewing blood on them. No need to go looking for more poison gas or a stray comet!

Viral Infection

This is one of the most common methods of reanimation. There are various strains of the zombie virus, notably "traditional" plague and the newfangled rage virus, which makes for lethal, fast-running zombies.

Poison Gas

If you want to be zombified, keep an eye out for crusty old barrels of mysterious fluid, especially those that bear insignia from any sort of military organization.

Cursed Earth

In Italy, there's a little graveyard that's famous for reanimating the nicest corpses. And in a sleepy Maine town, there's a pet cemetery with equally zombilicious powers.

Space Invaders

When the Earth passes through a comet's tail, crazy things can happen. If the comet is particularly deadly, anyone who stays up late to watch it streak across the sky will turn into a zombie. Other reported cases have been caused by the exposure of hapless humans to toxic radiation from outer space.

Possession by Evil Spirits

In a realm beyond mortal experience lies a mysterious book known as the *Necronomicon*, a tome invented by H. P. Lovecraft and rumored to be full of incantations that allow sorcerers to reanimate the dead with vengeful spirits.

Pure Evil

Some humans were so vile in life that their evil pursues them in death. This despicable force reanimates their dead flesh so that they may continue their wicked, destructive ways.

Voodoo

A *bokor*, or traditional voodoo sorcerer, has the power to transform living people into the walking dead using a powerful brain-numbing potion.

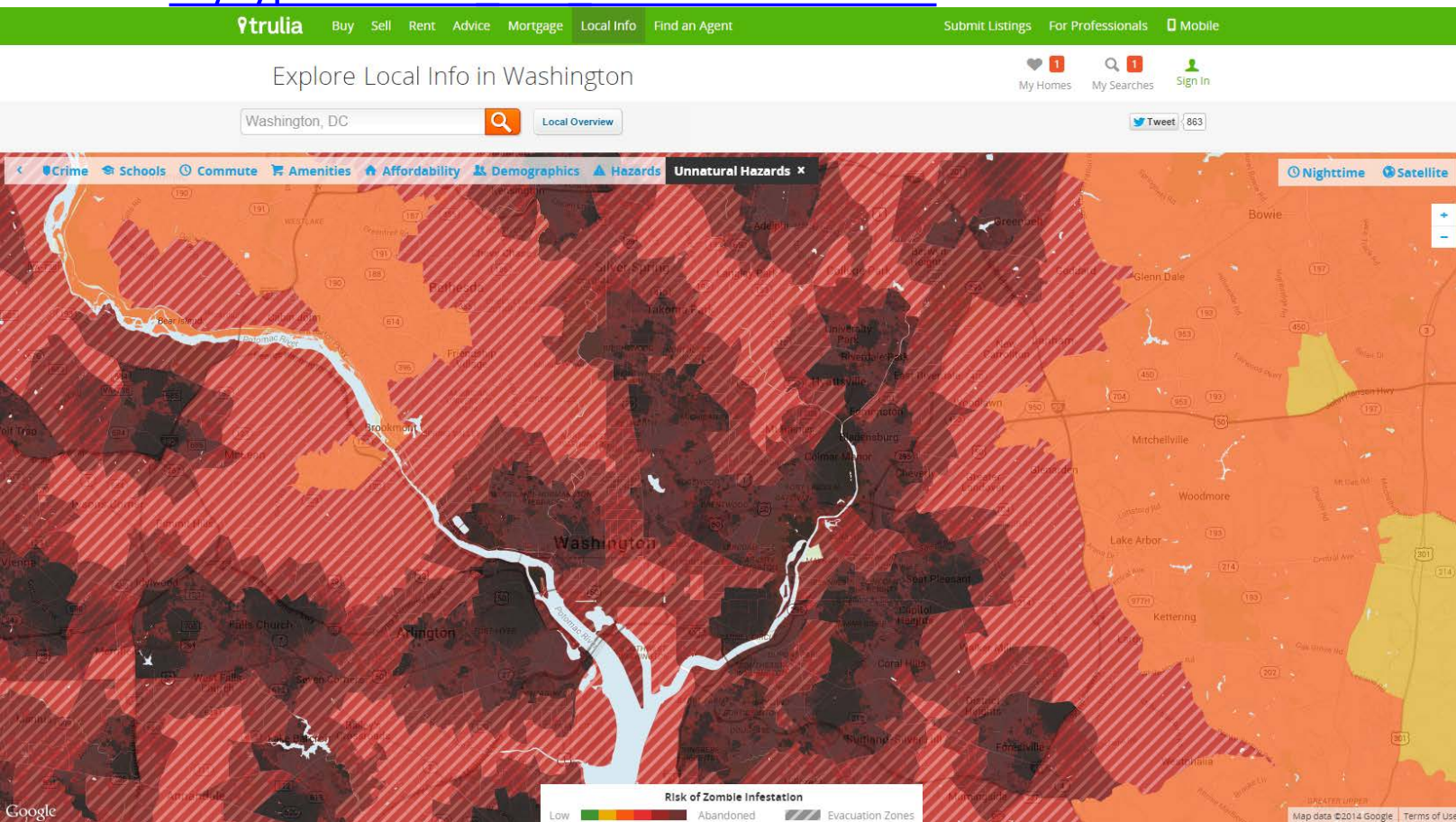
Mad Scientists

These brilliant but unbalanced members of the scientific community can create depraved serums for bringing life to dead flesh, although they often destroy themselves in the process. Zombies made in this fashion, much like those created by voodoo curses, are usually at the whim of their "masters."



Geocoding: Unnatural Hazards

- http://www.trulia.com/local/washington-dc/type:zombie_risk_unnaturalHazards



Trulia based their decisions on 4 categories:

1. highest walk score,
2. low density of hardware stores,
3. high density of hospitals, and
4. most congestion.

1912-1914: Freud's Classic Papers on psychoanalytic technique

- *The Dynamics of Transference* (1912a),
- *The Employment of Dream-Interpretation in Psychoanalysis* (1912b)
- *Further Recommendations in the Technique of Psychoanalysis: Recollection, Repetition, and Working Through* (1914),
- *Further Recommendations in the Technique of Psychoanalysis: Observations on Transference-Love* (1915)
- *On Narcissism* (1915)

Electro Magnetic Pulses

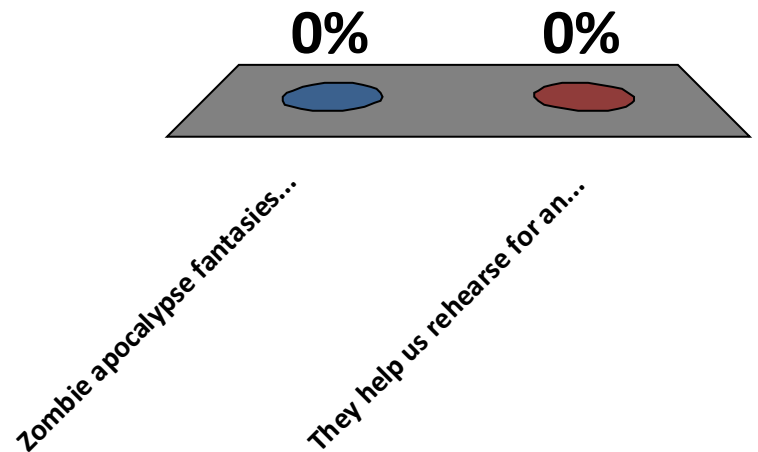
Congress concerned about EMP

- Lose faith in institutions
- Lose faith in civil society to maintain order
- As sense of community declines, alienation increases
- Presumed threats, real or imagined
- End of days → preppers
- Non-perishable supplies at Coscos
- government will have to handle security
- Realize that things you have been putting your faith in are fallible (health workers with Ebola; police in Ferguson)

Forced Choice Question:

Do you think:

- A. Zombie apocalypse fantasies distract us from scenarios too serious to imagine (like global climate change, viral pandemics, and global terrorism)
- B. They help us rehearse for and prepare for imminent catastrophe.



We fear death so profoundly, not because it means the end of our body,
but because it means the end of our consciousness –
better to be a spirit in Heaven than a zombie on Earth.

Alison Gopnik

A zombie apocalypse isn't the most jovial situation.

Danai Gurira

We are living on the brink of the apocalypse, but the world is asleep.

Joel C. Rosenberg

The probability of apocalypse soon cannot be realistically estimated,
but it is surely too high for any sane person to contemplate with equanimity.

Noam Chomsky

Haiti, 2010







The Criminal offers nothing to society



Baghdad, 2008



PREPAREDNESS 101:

ZOMBIE PANDEMIC



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention



UHP? WHAP?

(WHINED)

WHAT IS IT MAX?
IT'S STILL DARK OUT.



OKAY, OKAY... I'M COMING.
LET'S TAKE A PEEK OUTSIDE
AND SEE WHAT'S HAPPENING...



WHAT THE... P!!



MAX, I THINK
WE BETTER TURN
ON THE TV...



NOTHING BUT SNOW.
LET'S TRY
THE RADIO...

UHM... TODD...
WHAT'S GOING ON NOW?



STAY IN YOUR HOMES. DO NOT GO
OUTSIDE. IF YOU OR YOUR FAMILY
BEGIN SHOWING SYMPTOMS SUCH AS
SLOWED MOVEMENT, SLURRED SPEECH,
OR VIOLENT BEHAVIORS. ISOLATE
THEM TO A SECURE AREA OF THE HOUSE.
STAY TUNED FOR MORE INFORMATION ON
WHERE TO GO... STAY IN YOUR...



!!

TO BE CONTINUED...

All-Hazard Emergency Kit

- ❑ Water—one gallon per person, per day
- ❑ Food—nonperishable, easy-to-prepare items (minimum 3 day supply)
- ❑ Flashlight
- ❑ Battery-powered or hand-crank radio (NOAA Weather Radio, if possible)
- ❑ Extra batteries
- ❑ First aid kit (whistle, antibiotic ointment, bandages, face masks, gloves and reference book)
- ❑ Medications (7 day supply and medicinal dispensers if necessary)
- ❑ Multipurpose supplies (wrench, pliers, plastic sheet, duct tape, scissors, matches)
- ❑ Sanitation/personal hygiene items and bleach
- ❑ Copies of personal documents (medication list and pertinent medical information, proof of address, deed/lease to home, passports, birth certificates, insurance policies)
- ❑ Cell phone with charger
- ❑ Family Disaster Plan (family and emergency contact information)
- ❑ Extra cash
- ❑ Emergency blanket, extra clothes, sleeping bag (1 for each person)
- ❑ Map(s) of the area




Joseph Porcelli The trust is 1/3 of your will prepared, 1/3 of you might prepare, and 1/3 of you won't prepare (accounting to FEMA preparedness report <http://www.fema.gov/national-preparedness-report>)

National Preparedness Report | FEMA.gov

Presidential Policy Directive 8: National Preparedness, requires an annual National Preparedness Report (NPR) that summarizes national progress in building, sustaining and delivering the 31 core capabilities outlined in the National Preparedness Goal (the Goal).

FEMA.GOV

October 15 at 9:59pm · Like  1



Allen Dyer And a battery cell phone charger. There is a good list on [CDC.gov](http://www.cdc.gov) for preparing for zombie apocalypse, which is also useful in case of more mundane disasters.




Centers for Disease Control and Prevention

CDC works 24/7 to protect America from health, safety and security threats, both foreign and in the U.S.

CDC.GOV

18 hrs · Edited · Like · Remove Preview



Joseph Porcelli The question we all need to ask ourselves is, are we prepared to aid our neighbors who are not prepared. If you've never been through a disaster, chances are you and your neighbors are not fully prepared. The consequence of not being prepared is can be longer recovered times meaning expense and discomfort, and in the worst case scenario, even death. 

October 15 at 10:01pm · Like

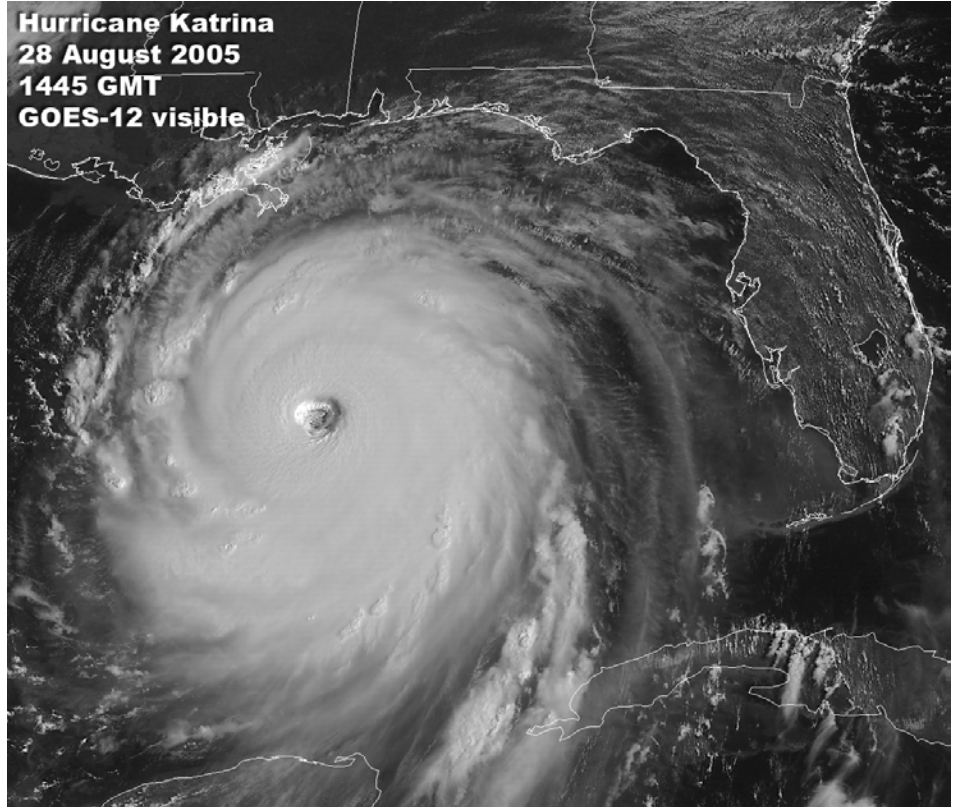
Global Health
is *Always* Local

America's Disasters

11 September 2001



Hurricane Katrina
28 August 2005
1445 GMT
GOES-12 visible

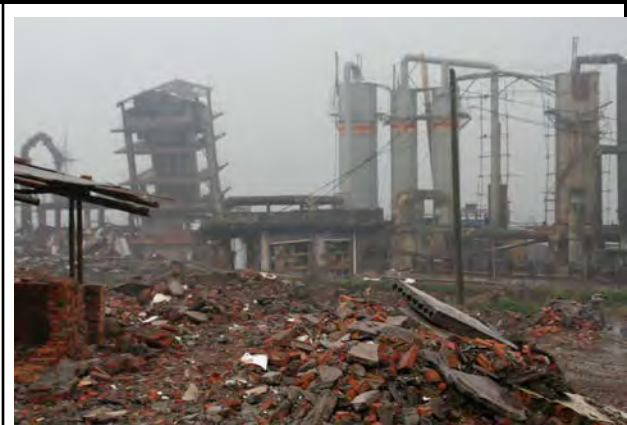


DISASTER

- Disaster is a severe disruption of ecological and psycho social which greatly exceeds the coping capacity of affected community.

WHO, 1992





Train-the-trainers model

Task Shifting (Task sharing)

Community Level Workers (CLW)

School teachers

Health Care workers

Government workers and NGOs

Volunteers

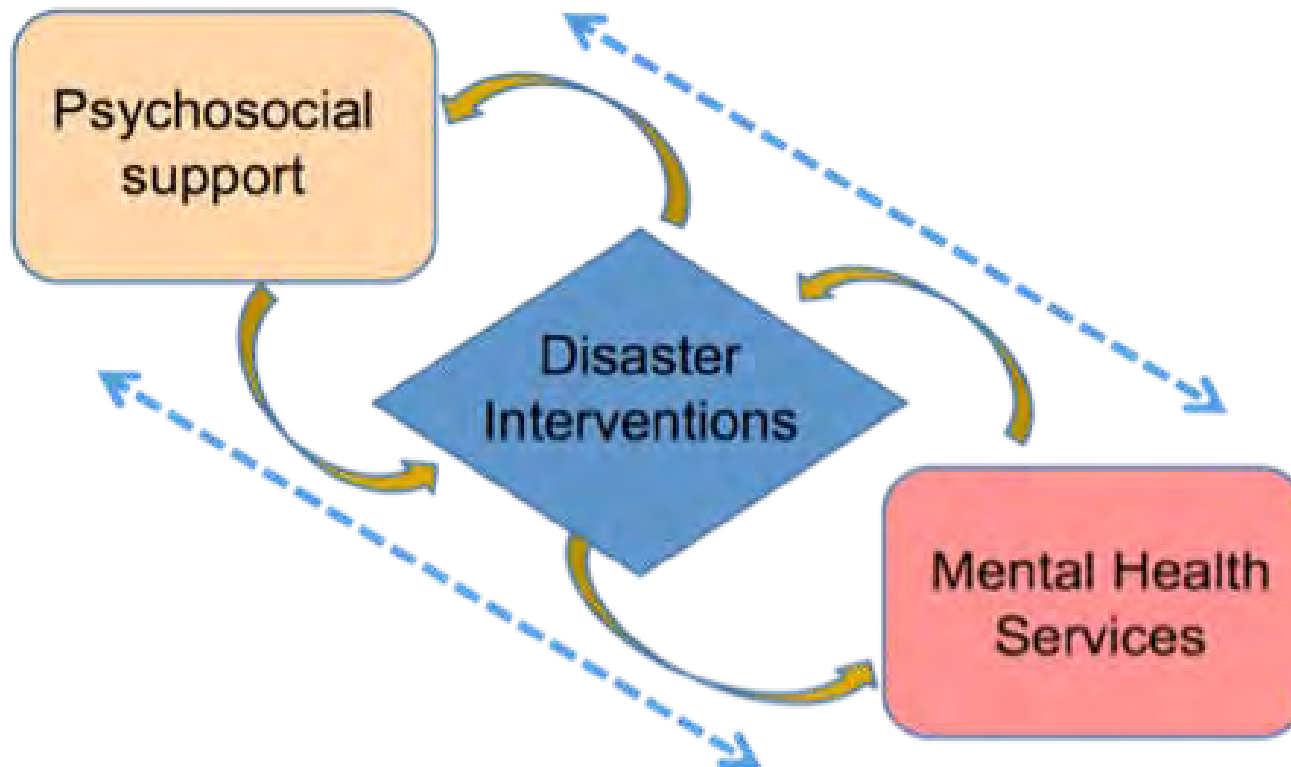
Resources:

- Psychological First Aid (PFA)
- IASC Guidelines for Mental Health and Psychosocial support
- mhGAP

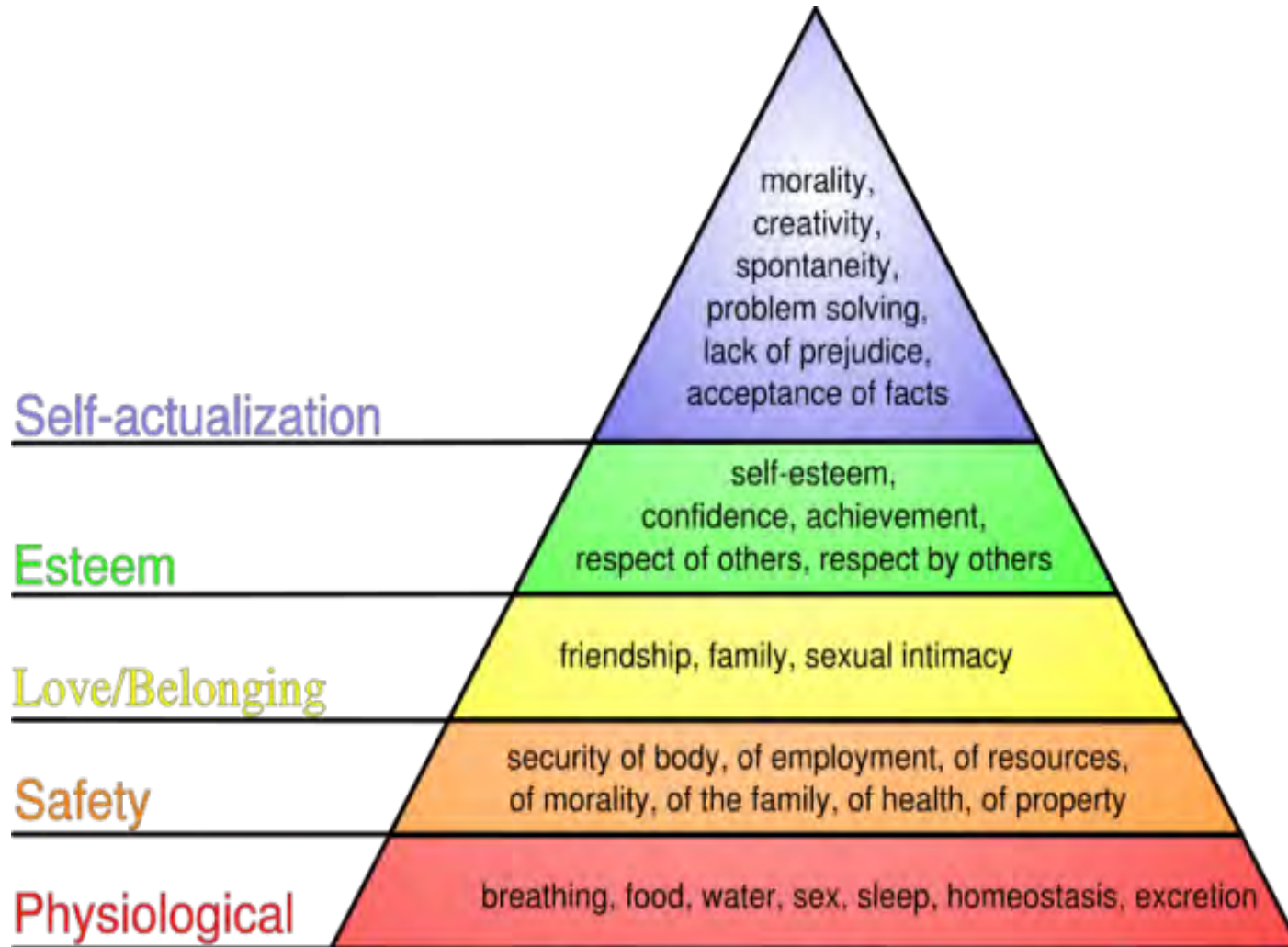
Counseling the counselors (Training the trainers)



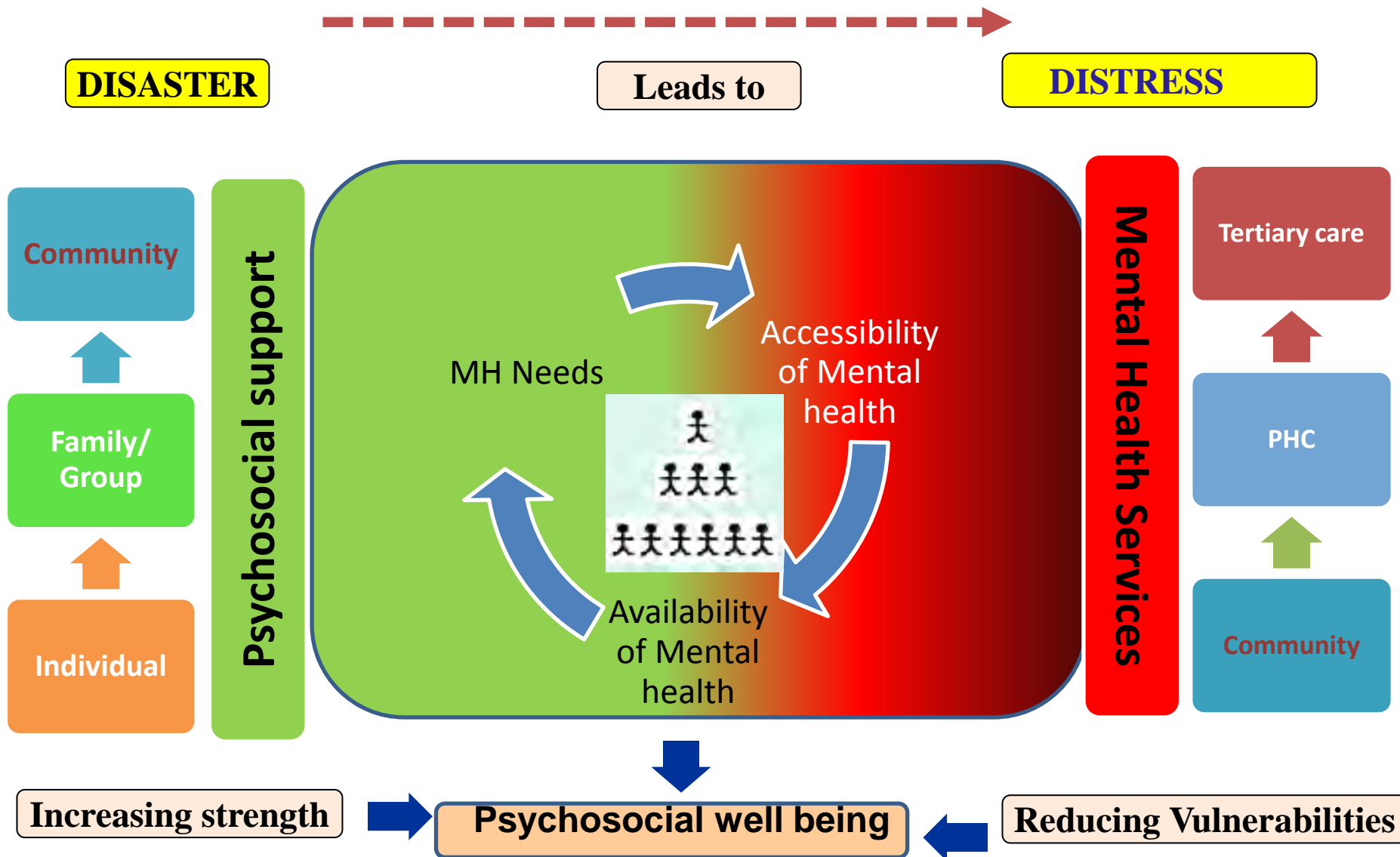
Relationship of Mental Health and Psychosocial support



Maslow's Hierarchy of Needs



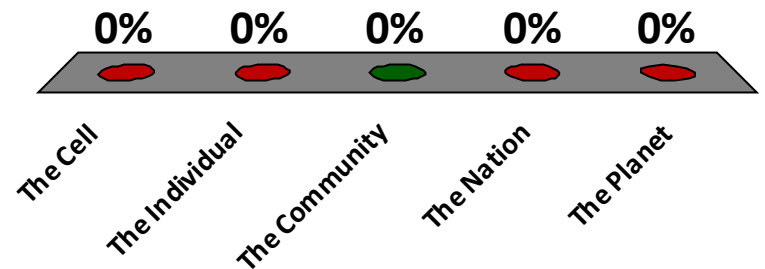
A diagram of service/programme



Stop – Talk - Share

The smallest unit of health is:

- A. The Cell
- B. The Individual
- C. The Community
- D. The Nation
- E. The Planet



The smallest unit of health is

The smallest unit of health is the community.

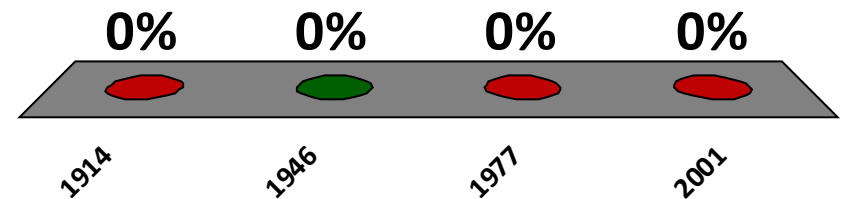
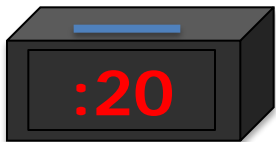
Wendell Berry

American agrarian philosopher

STOP – TALK – SHARE

Health = “a state of complete physical, mental and social well-being not merely the absence of disease or infirmity.”

- A. 1914
- B. 1946
- C. 1977
- D. 2001



Health =

“a state of complete physical, mental and social
well-being
not merely the absence of disease or infirmity”

- Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States and entered into force on 7 April 1948.
- The Definition has not been amended since 1948.

International Consensus Conference WHO, Geneva, January 2013



THE GW INSTITUTE FOR
SPIRITUALITY & HEALTH



Disasters

- Joplin tornado (2011)
- Hurricane Katrina (2005)
- Hurricane Irene (2011)
- September 11, 2001
- Chernobyl (1986)
- Japan Earthquake and Tsunami (2011)
- Haiti Earthquake (2010)
- San Francisco Earthquake (1906)
- Wildfires in Southern California (2007)
- Nashville Flood (2010)
- H1N1 (2009)
- Spanish Influenza (1918)
- Polio (1952)
- Oklahoma City bombing (1995)
- Chicago Heat Wave (2005)
- Arkansas Floods (2010)
- Super Tuesday Tornado Outbreak (2008)
- Blizzard of 1999
- Storm of the Century (1993)
- SARS in Asia (2002)
- London Train Bombing (2005)
- Anthrax Attacks (2001)

WPS Embassies Project



The time to prepare for disaster
is before it happens!

Gomma, UN refugee camp, DRC



There are only 800 of us . . .



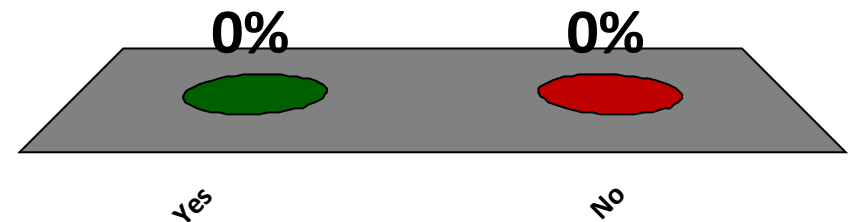
“When you’re locking eyes with a gorilla,
the chaos of Congo seems totally worth it”

Washington Post, October 12, 2014

Forensic Question

If a zombie bites you, can you recover damages?

- A. ☒ Yes
- B. ☐ No



Forensic Question

Correct answer:

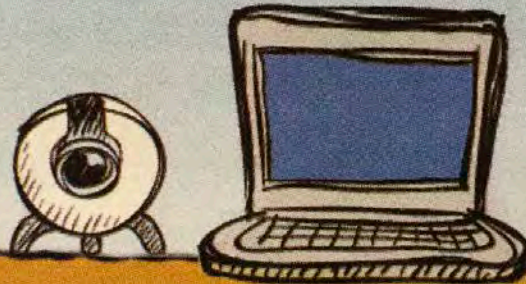
Yes – In tort law mental infirmity is not a defense

Unlike criminal law where diminished capacity can be used as a defense.

Ethical question

- Is it morally justifiable to shoot to kill a zombie?

PSYCHIATRIC HELP



THE DOCTOR
IS **IN**