

# *From Rescue To Resilience*



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# Presentation Objectives



At the completion of this presentation, participants will be able to:

- Identify the limitations of the rescue paradigm
- Advocate for community-wide development
- Equip local health leaders to care for their own

# Crisis

## Hurricane Katrina 2005

- Costliest natural disaster in US history
- One of the five deadliest hurricanes in US history
- At least 1836 people died & \$80 billion lost



# Crisis

## Hurricane Katrina 2005

- Hurricane warnings posted five days in advance
- Levees protecting New Orleans know deficient decades in advance



# Rescue

## Hurricane Katrina 2005

- Evacuation ordered on Aug 29 – 20 hours before landfall
- Over 60,000 people left stranded in New Orleans



# Lessons Learned



*Why was New Orleans so devastated by Hurricane Katrina?*

# Crisis



## Haiti Port-au Prince Earthquake 2010

- 316,000 people killed
- 300,000 injured
- 1,000,000 made homeless
- 250,000 residences and 30,000 commercial buildings destroyed

# Crisis



## Haiti Port-au Prince Earthquake 2010

- Presidential Palace collapsed
- Among the dead Archbishop of PAP and United Nations Mission Chief
- 52 aftershocks over the next 2 weeks

# Rescue

## Haiti Port-au-Prince Earthquake 2010



- Massive response from some 50 nations
- 10,000 United Nations peacekeepers
- 150,000 volunteer personnel
- 4,000 aircraft
- 6,000 ships



Doctors Without Borders press release: "This is like working in a war situation. We don't have any more morphine to manage pain for our patients. We cannot accept that planes carrying lifesaving medical supplies and equipment continue to be turned away while our patients die."

# Lessons Learned

*Why was Port  
au-Prince  
devastated  
by this  
earthquake?*



# Question 1

True or False:

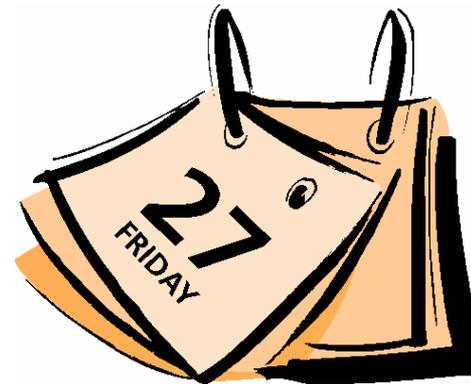
Disasters are truly exceptional events.



# Answer 1

False

Disasters are a predictable part of daily life and in very many cases are repetitive events.



# Crisis

## Zimbabwe Cholera Outbreak

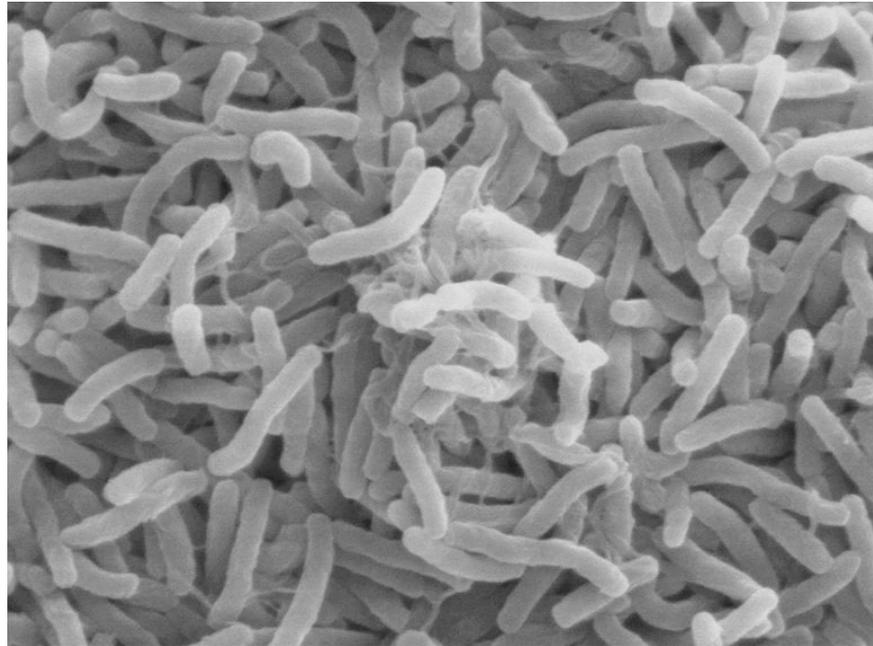
- Spread to Botswana, Mozambique, South Africa and Zambia
- 98,741 reported cases
- 4,293 deaths



# Zimbabwe Cholera Outbreak

# Crisis

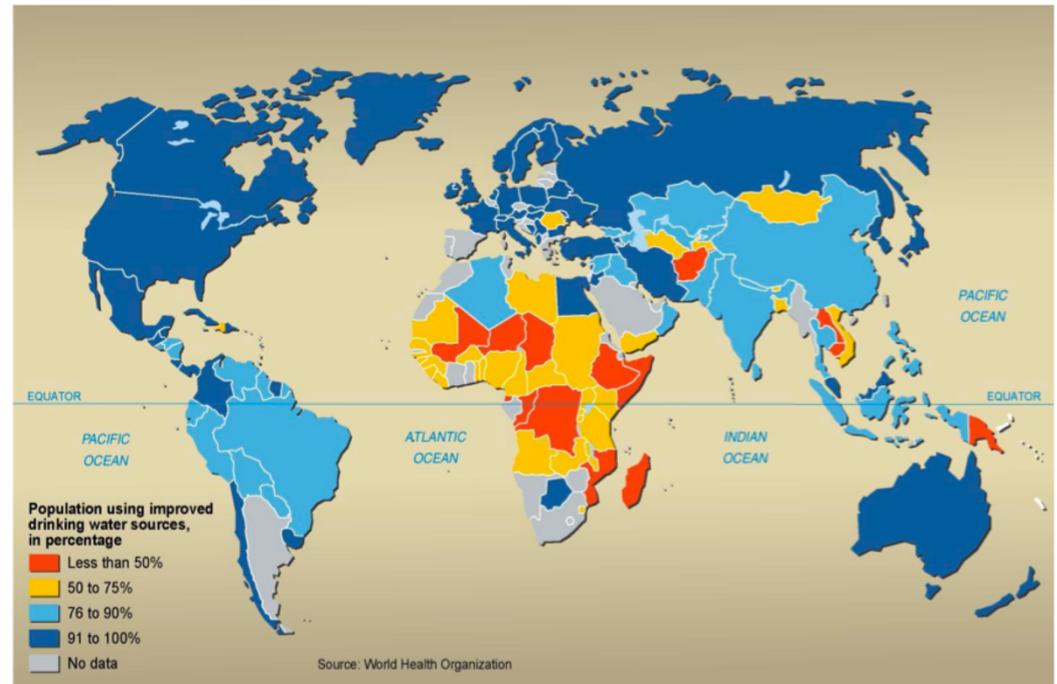
- The deadliest African cholera outbreak in the last 15 years
- *Vibrio cholerae* causes an acute, profuse watery diarrhea that may lead to severe dehydration, hypovolemic shock, and death within 24-48 hours.



# Zimbabwe Cholera Outbreak

- Response by the UN, EU, WHO, Red Cross, African Union plus 12 individual nations
- UNICEF distributed 360,000 liters of water per day in Harare
- Zimbabwe's president there was no cholera crisis

# Rescue



Access To Safe Drinking Water

# Lessons Learned

*Why has  
Zimbabwe been  
afflicted by  
cholera?*



# Crisis

## Ongoing Measles Epidemic

- Yearly 164,000 deaths worldwide due to measles
- 77 percent within the South-East Asia alone



# Crisis

## Ongoing Measles Epidemic

- Complications are common: pneumonia, diarrhea, and corneal ulceration
- Less common: encephalitis and blindness
- Increased morbidity and mortality in those with HIV and with underlying malnutrition



# Rescue

## Ongoing Measles Epidemic

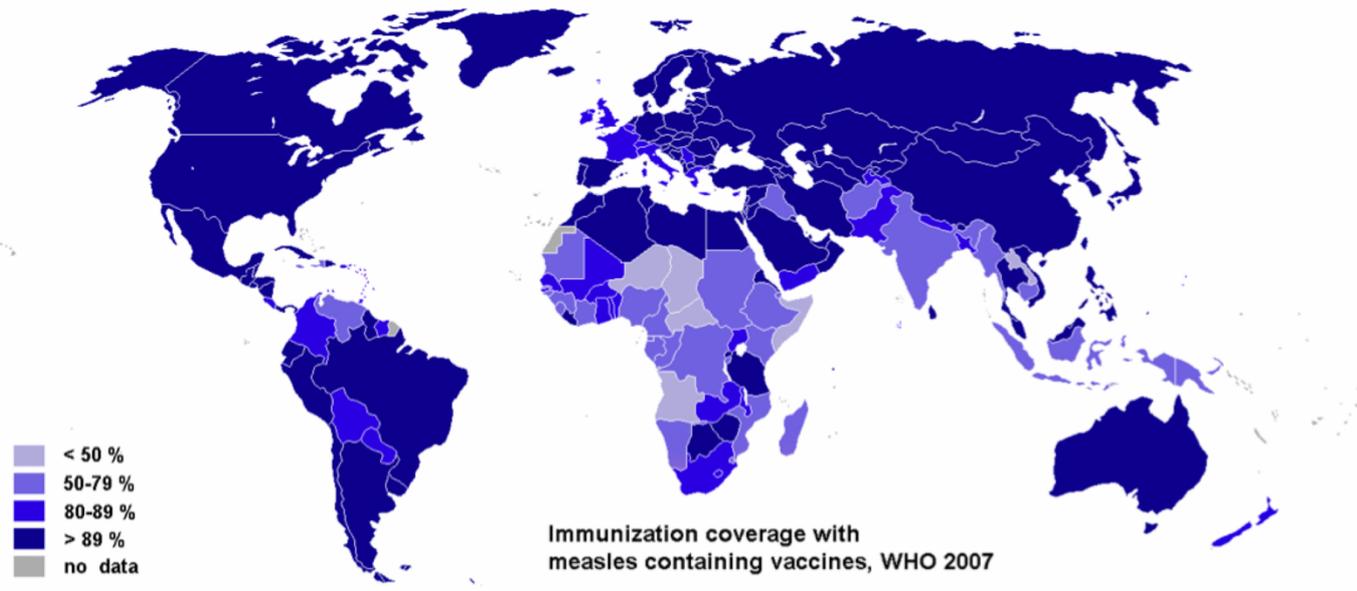
- Of 36,282 suspected measles cases - 7,086 cases were confirmed through laboratory examination.
- 4,493 of confirmed cases had no history of vaccination
- Regular outbreaks of measles continue to be reported



Measles vaccination in Vietnam

# Lessons Learned

*Why do people continue to suffer from measles?*



Measles vaccine coverage

## Question 2

The Expanded Program on Immunization (EPI) facilitates vaccination of children against common vaccine-preventable diseases. EPI in most developing nations includes vaccination against which ONE of the following diseases?

- A. Pertussis
- B. Malaria
- C. Pneumococcus
- D. Influenza
- E. Hepatitis A

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# Our Fascination With Rescue!

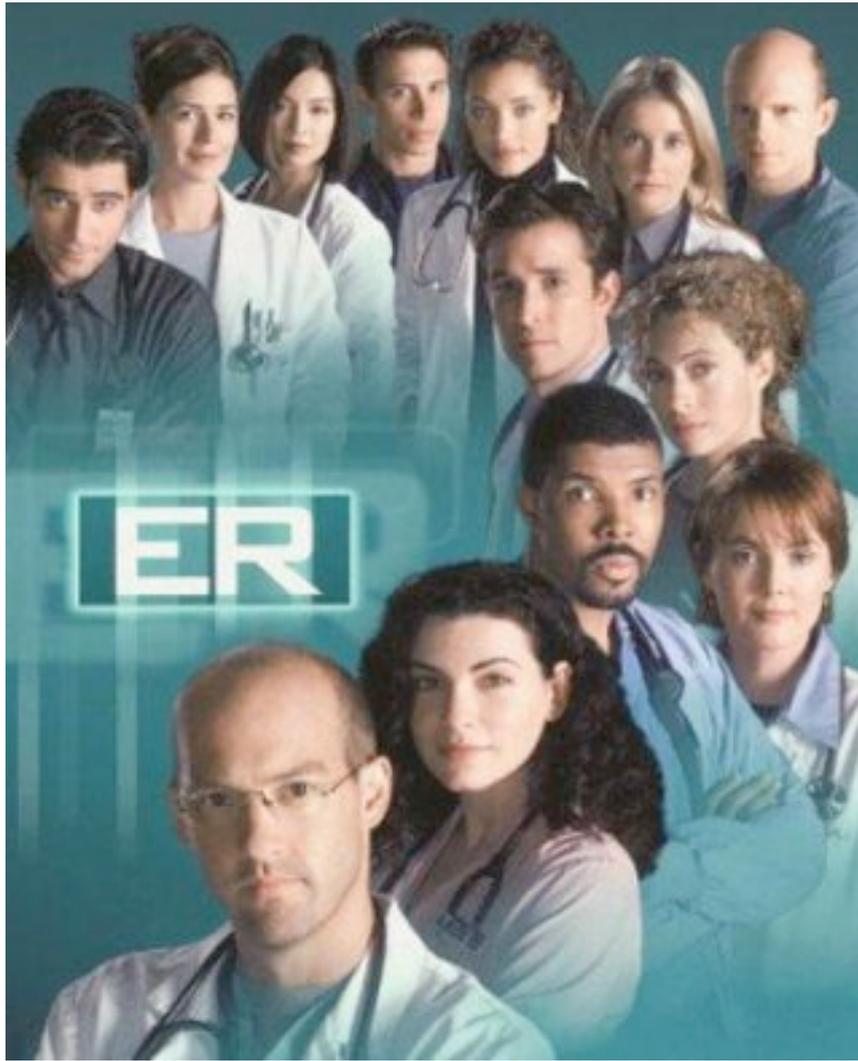




Aired 1972-1983 following a team of doctors and support staff stationed at an Army Surgical Hospital in South Korea during the Korean War



M\*A\*S\*H finale was the most-watched television episode in U.S. television history with 105.97 million viewers



Aired 1994-2009, the longest-running primetime medical drama in American TV history.



Won 23 Emmy Awards, including the 1996 Outstanding Drama Series. It received 124 Emmy nominations - the most of any television show in history.



# OFF THE MAP



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# GREY'S ANATOMY

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# CHICAGO MED

FROM EXECUTIVE PRODUCER **DICK WOLF**



**EMTALA**

*Emergency Medical Treatment and  
Active Labor Act*

*If you have a medical emergency or are in labor, you have the right to receive the following care within the capabilities of this hospital's staff and facilities, even if you cannot pay or do not have medical insurance or you are not entitled to Medicare or Medicaid:*

- An appropriate medical screening exam*
- Necessary stabilizing treatment (including treatment for an unborn child)*
- An appropriate transfer to another hospital, if necessary*





**Over 5,000 short-term  
healthcare mission trips  
outside the US each year**



Typically 1-2 weeks in length, most providing episodic medical care

***Why* are we so fascinated  
with rescue?**





# ***Why* are we so fascinated with rescue?**

- Deep 'parental' instincts to defend people in crisis
- Desire to see rapid results
- Excitement of drama in real life



# *What* are the shortcomings of rescue?



# ***What are the shortcomings of rescue?***

- Most crises are far easier to prevent
- Rescue is costly, resource-intensive
- Repeated, predictable rescue is shortsighted





***Can we move from  
RESCUE  
to  
RESILIENCE?***





*Can we move from  
**CRISIS INTERVENTION**  
to  
**CRISIS PREVENTION?***



***What are the  
advantages of  
building  
resilient  
communities?***



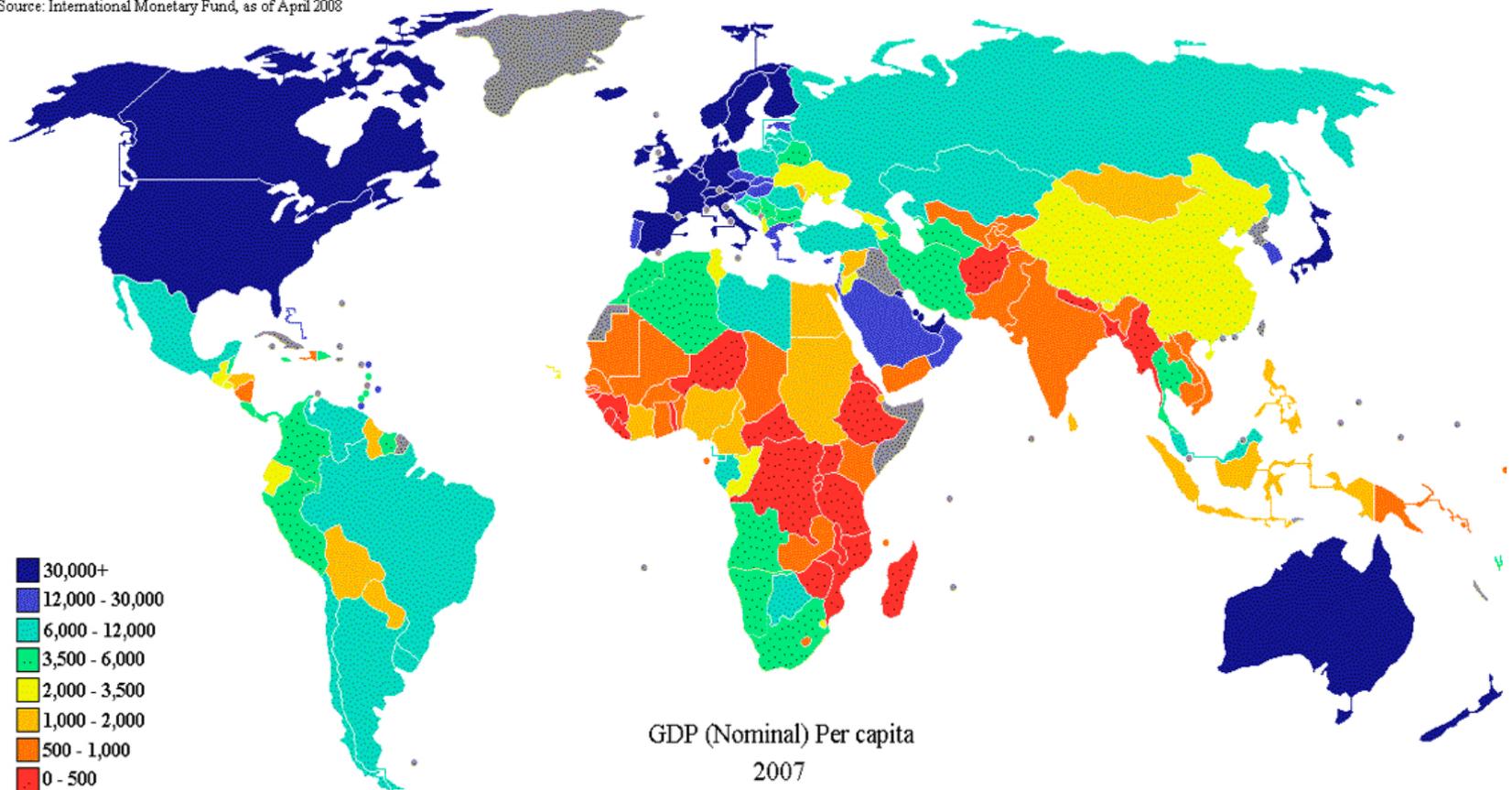
# ***Resilient Communities...***

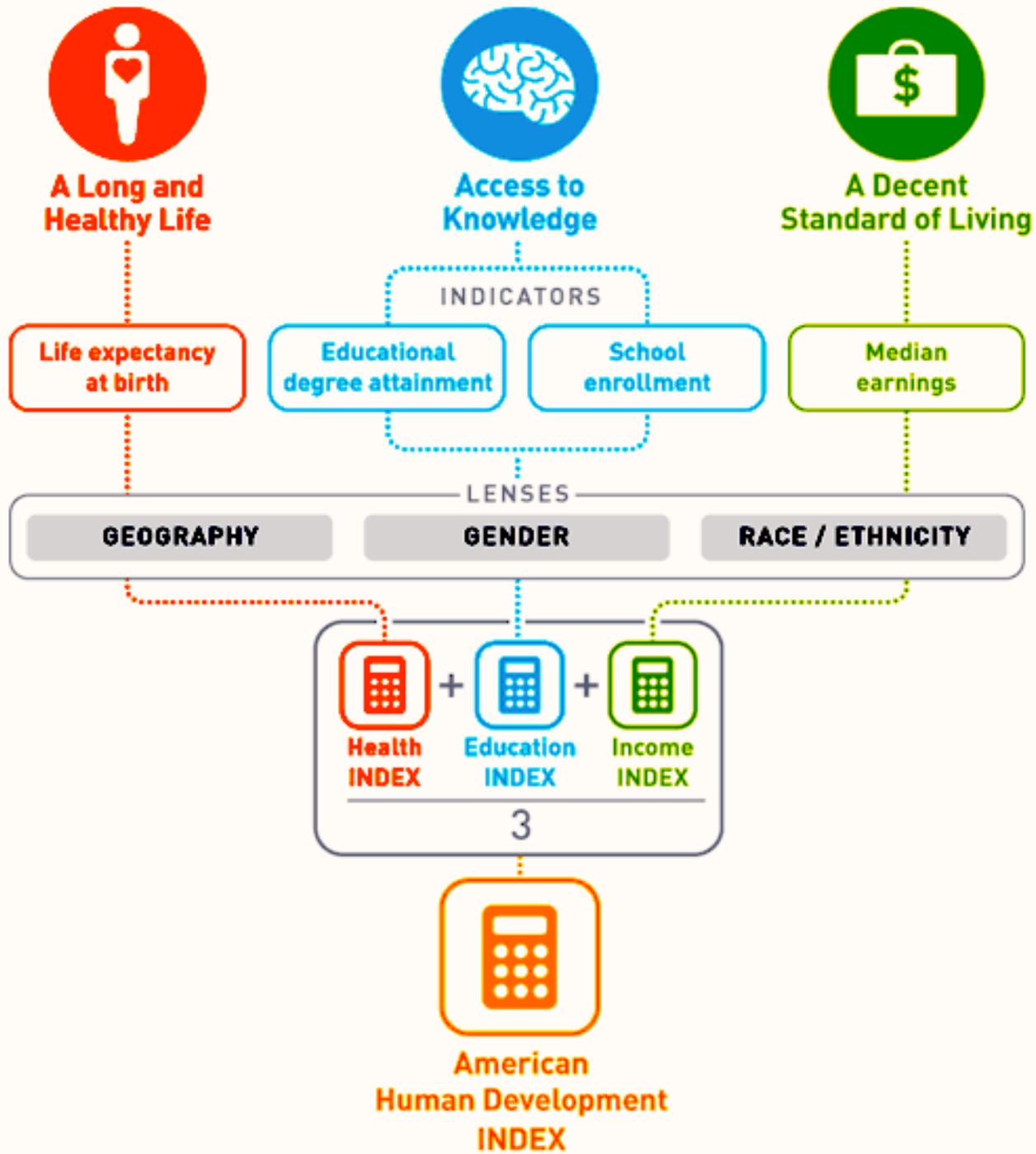
- Are less prone to disease & disaster
- Have greater life expectancy & quality of life
- Need fewer resources diverted to expensive response to disease & disaster



# How can we build resiliency in the world's most vulnerable communities?

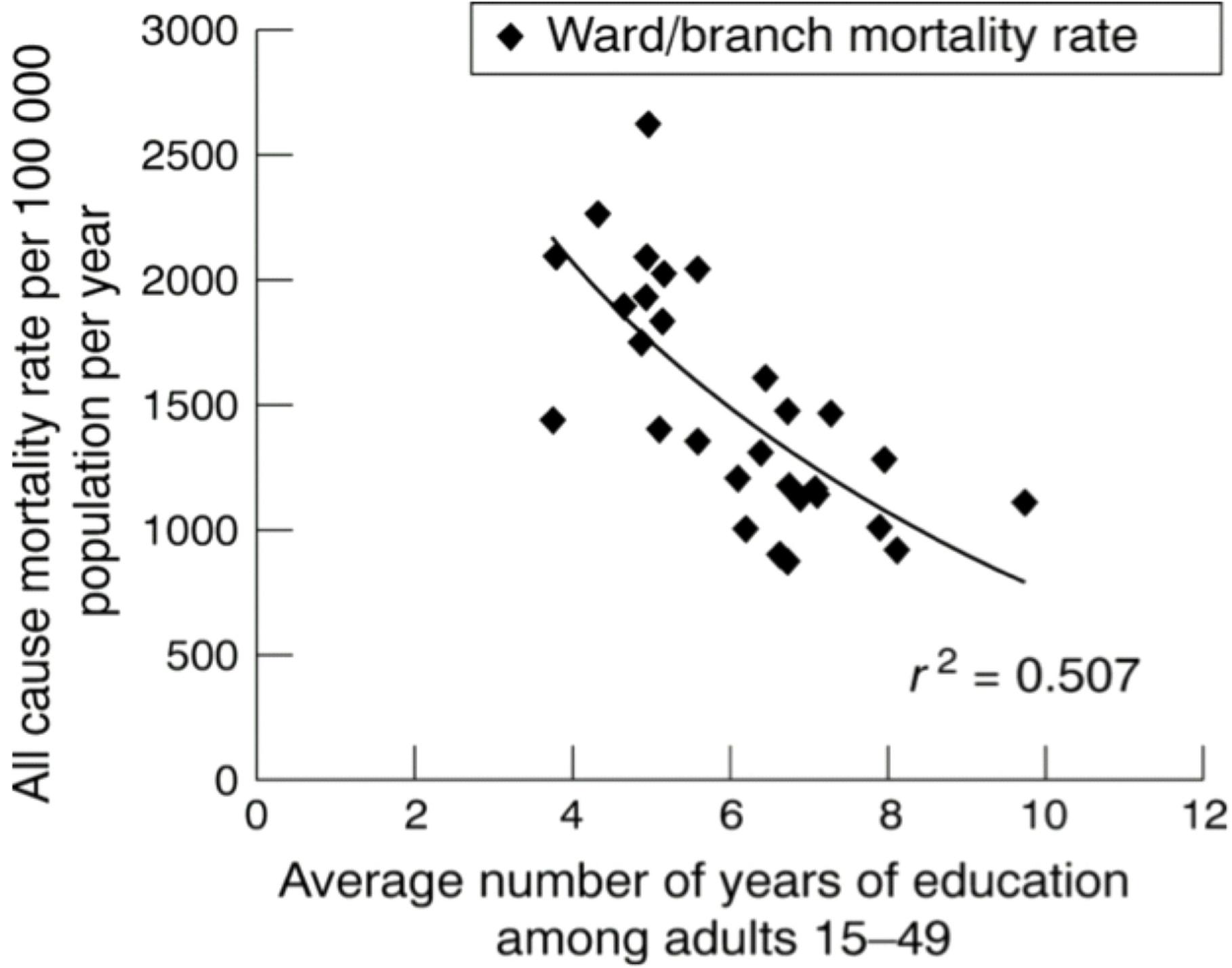
Source: International Monetary Fund, as of April 2008





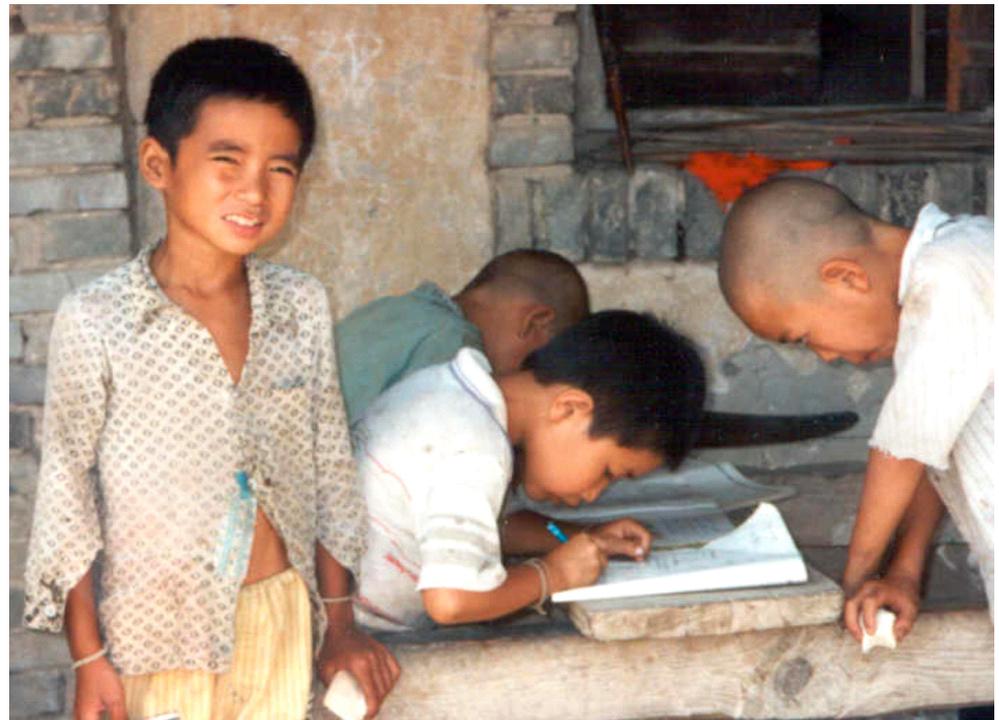
# Build Access To Knowledge: Literacy & General Education

- The level of general education in a community is highly correlated with both physical health status.
- Some of the strongest research comes from Tanzania, showing a strong correlation between average years of formal education and the mortality rate for their respective communities



# Advocate For Literacy & General Education

- Increase community awareness
- Recruit teachers and leaders in education
- Solicit funding for education
- Urge parents and youth to take advantage of educational opportunities



# Question

All of the following statements are TRUE regarding the health and general education EXCEPT which ONE?

- A. As average years of education increase in a community, so does the rate of all cause mortality.
- B. Increased general education is positively associated with increased economic productivity.
- C. Frequently ill children attend school less, have lower school performance, and have lower economic achievements later in life.
- D. Greater educational opportunities for women foster improved nutrition and improved access to medical care.

# Answer

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# Build A Standard of Living: Increase Earnings



Poverty is the greatest risk factor for preventable death; associated with poor housing, unsafe drinking water, inadequate sanitation, poor nutrition, low vaccination, inadequate medical care.

*A NEW YORK TIMES BESTSELLER*

**JEFFREY D. SACHS**

*AUTHOR OF COMMON WEALTH*

The End  
of Poverty

# Interventions For Economic Development

- Power, transport and com services: Brings refrigeration, water pumps, lights, computers, new markets for sale of local goods and services
- Safe drinking water & sanitation: Saves countless hours transporting water to homes. Water via boreholes, protected springs or rainwater harvesting.
- Agricultural: With fertilizers, irrigation, and improved seeds, & storage facilities crop yields could predictably triple.





# Economic Development: Heifer International

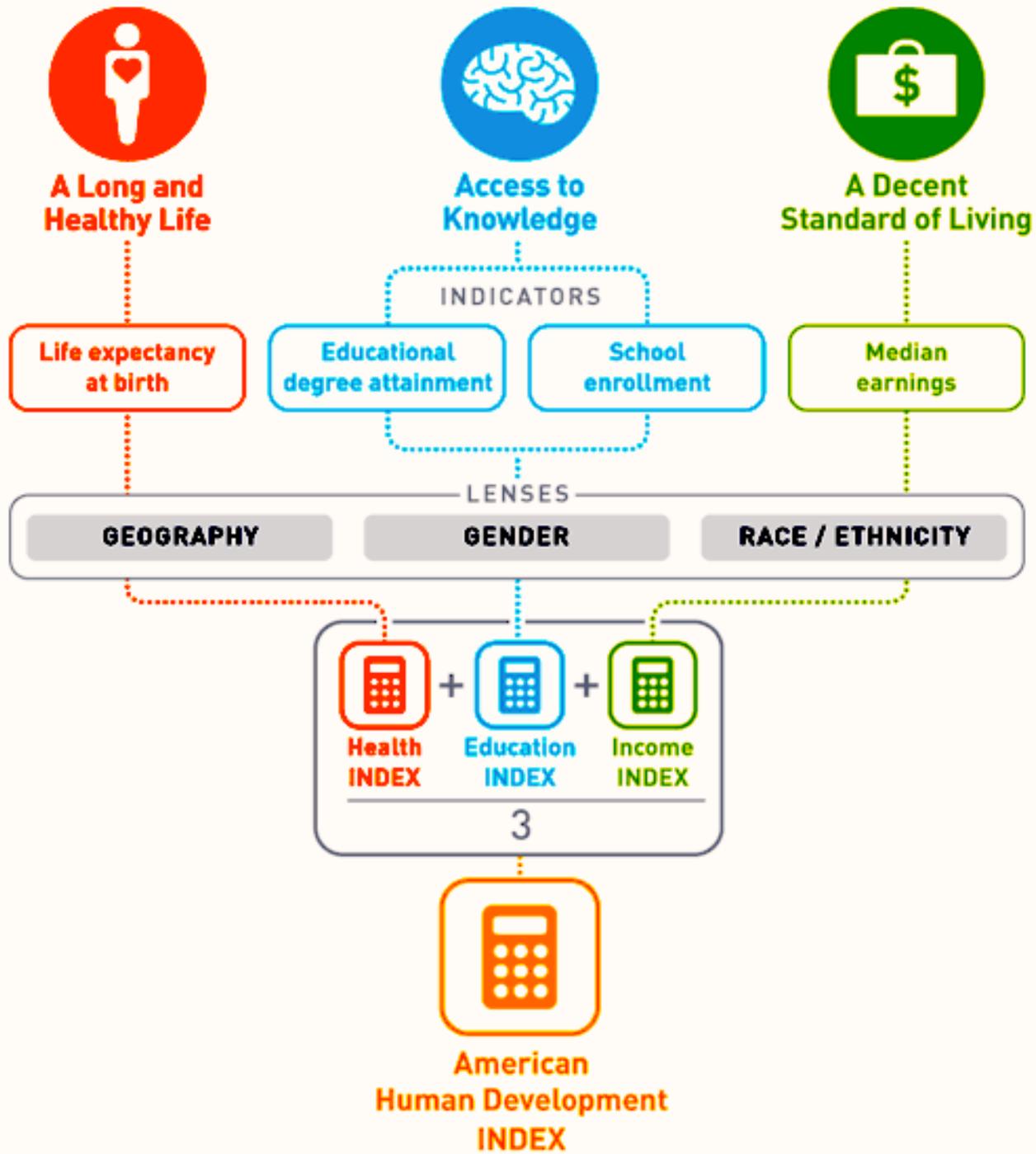
- Heifer's primary strategy is to propel families toward self-reliance through training and provision of livestock, seeds and trees.
- *Guns for Cows* project launched in Albania during that country's deadly period of civil unrest in 1997. Albanian villagers receive one pregnant Holstein or Jersey dairy heifer for every three weapons they turn over to the government.





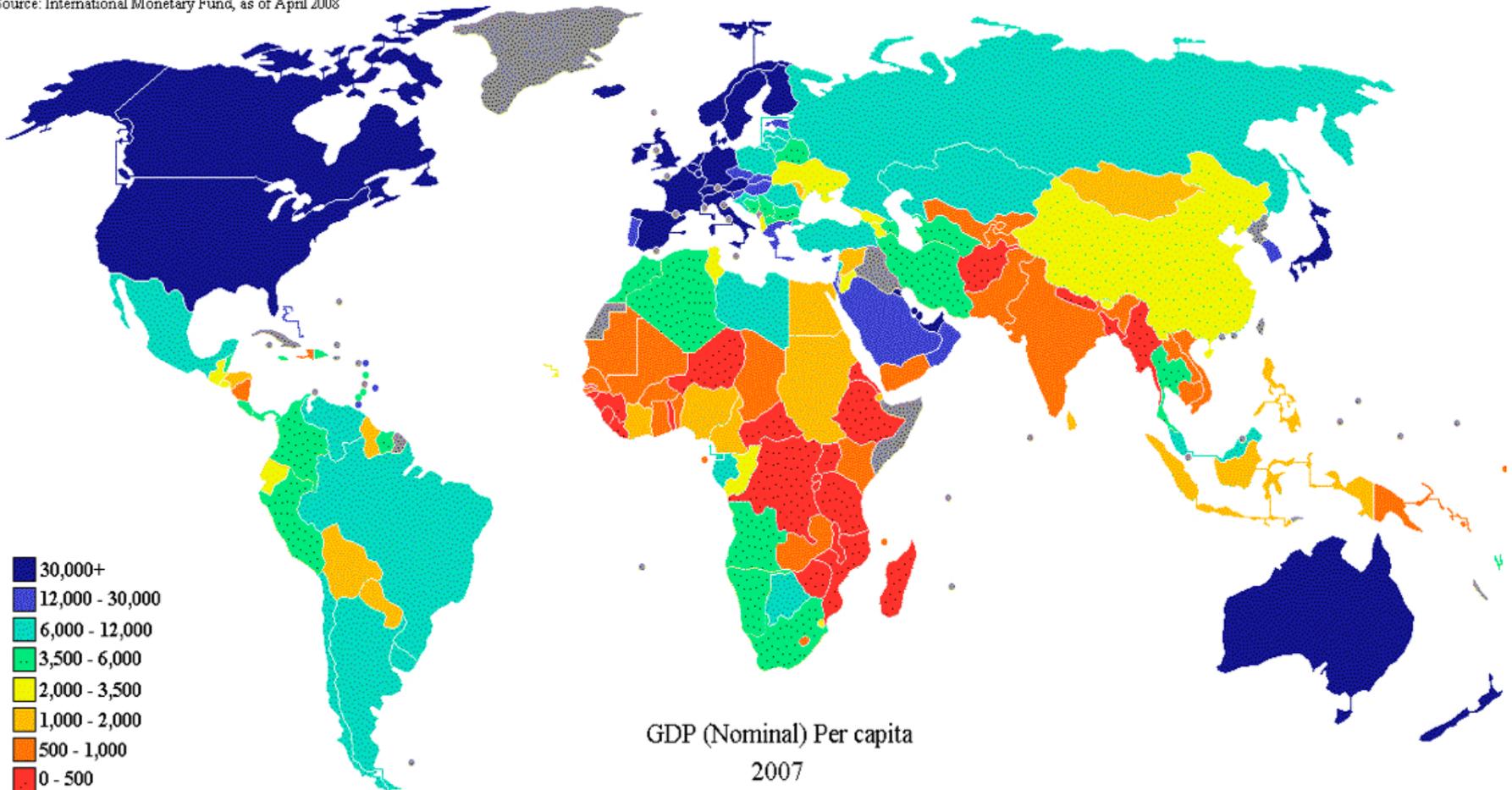
# Advocate For Economic Development

- Supporting agricultural training and development
- Advocating safe drinking water accessibility and sanitation
- Supporting communication and transportation infrastructure
- Encouraging local commerce and employment
- Support for banking and judicial systems



# Long Healthy Life: Build Life Expectancy

Source: International Monetary Fund, as of April 2008



**What are the leading  
*Diseases & Injuries* that  
cause disability & life years  
lost (DALYs) in the world's  
lowest-income nations?**

# Priorities In Effective Health Promotion By *Diseases & Injuries*

Disease or Injury	Percentage of Total DALYs Lost
Lower respiratory infection	9.7
Diarrheal diseases	6.9
Malaria	5.1
Preterm birth complications	5.1
HIV/AIDS	5.0
Birth asphyxia & birth injury	4.9
Congenital anomalies	3.2
Road injury	3.0
Neonatal sepsis & infections	2.7
Tuberculosis	2.5

**What are the leading *Risk Factors* for disability & life years lost (DALYs) in the world's lowest-income nations?**

# Priorities In Effective Health Promotion By *Risk Factors*

Risk Factors	Percentage of Total DALYs Lost
Childhood underweight	9.9
Unsafe water, sanitation & hygiene	6.3
Unsafe sex	6.2
Suboptimal breastfeeding	4.1
Indoor smoke from solid fuel	4.0
Vitamin A deficiency	2.4
Hypertension	2.2
Alcohol	2.1
High blood glucose	1.9
Zinc deficiency	1.7

# Question

Each of the following are leading *risk factors* for DALYs lost in low-income nations EXCEPT which ONE?

- A. Unsafe drinking water, sanitation and hygiene
- B. Underweight
- C. Hyperlipidemia
- D. Unsafe sex
- E. Vitamin A deficiency

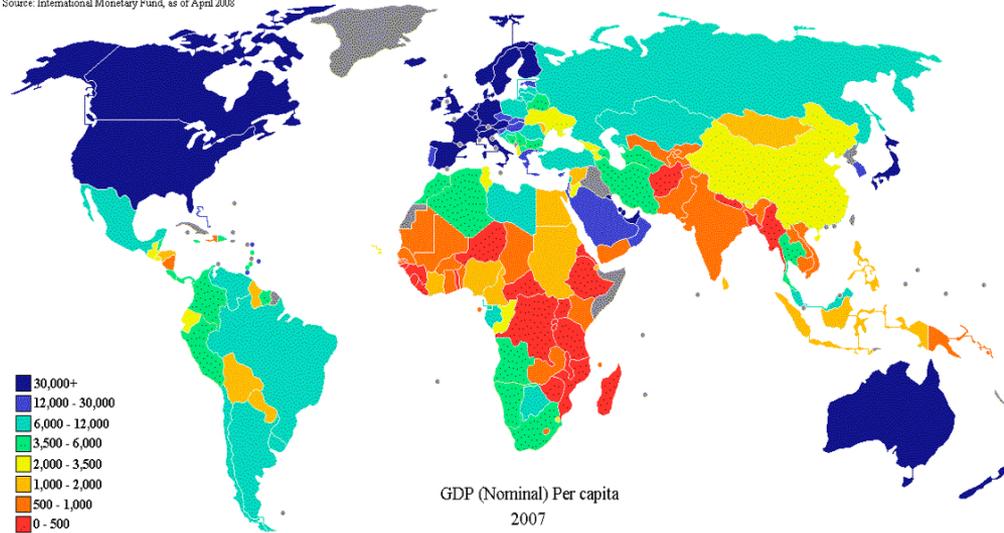
# Answer

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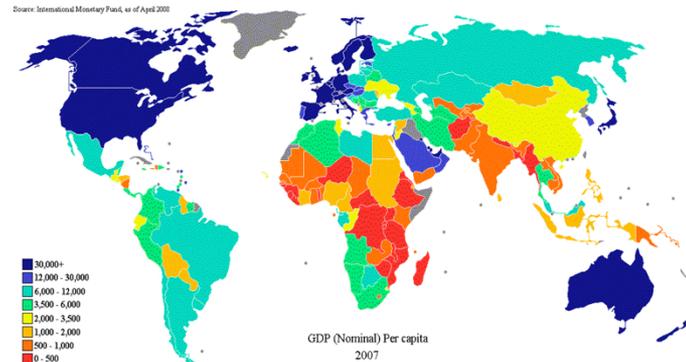
# Therefore, in the world's poorest communities, what are the highest priority health interventions?

Source: International Monetary Fund, as of April 2008



# Highest Priority Health Interventions

- Adequate nutrition
- Safe drinking water, sanitation and hygiene
- Reproductive health
- Vaccination
- Injury prevention
- Well child care





Where Should We Begin?

# Where Can YOU Begin?

- Volunteer for healthcare teaching opportunities in low-resource settings
- Financially support literacy NGOs
- Financially support economic development NGOs
- Be a role model in valuing the poor in your own community

# Equip Nationals To Care For Their Own

- Helping Babies Breathe - a neonatal resuscitation curriculum for resource-limited circumstances. Trains skilled attendance at birth attendants to assess and care for within "The Golden Minute" after birth. [www.helpingbabiesbreathe.org/](http://www.helpingbabiesbreathe.org/)
- Advanced Life Support in Obstetrics (ALSO) – trains physicians, midwives, labor and delivery nurses to effectively manage potential perinatal emergencies.
- Advanced Trauma Life Support (ATLS): training program for doctors and paramedics in the management of acute trauma. The program has been adopted worldwide in over 40 countries, sometimes under the name of Early Management of Severe Trauma (EMST).



Where Have You Begun?



**BAPTIST MEDICAL CENTRE**











# What Can YOU Do To Move Communities Toward Resiliency?





*Polish your skills to serve forgotten people*



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