

FUNDAMENTALS OF GLOBAL HEALTH:
The Future of Global Health
Spring 2014

This Week's Questions:

- **How will the GBD shift by 2030?**
- **What are the best GH strategies to meet these shifts and get results?**
- **What is Dr. Boyd's secret weapon against the future GBD?**

This Week's Questions:

- **How will the GBD shift by 2030?**
- What are the best GH strategies to meet these shifts?
- What is Dr. Boyd's secret weapon against the future GBD?

Top 10 Global Mortality: 2015-2030

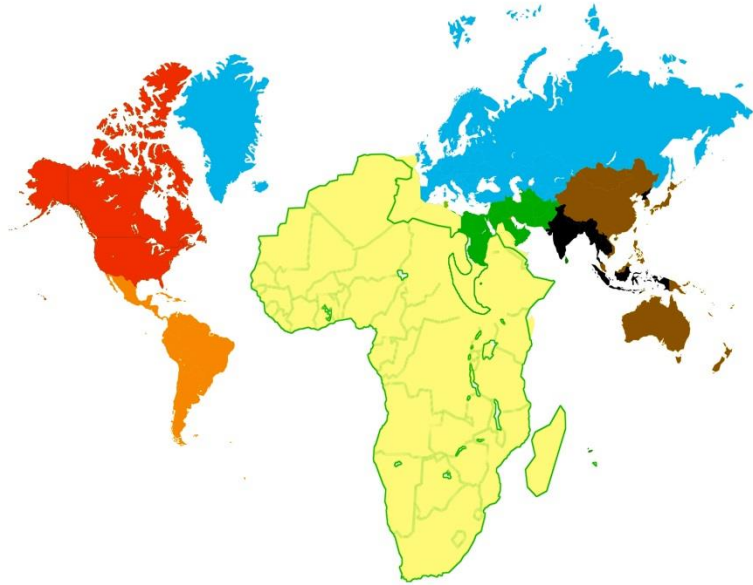
2015

- **Ischaemic heart disease**
- **Stroke**
- **LRI**
- **COPD**
- **Diarrhea**
- **HIV/AIDS**
- **Lung Cancer**
- **Diabetes mellitus**
- **Road injury**
- **Hypertension**

2030

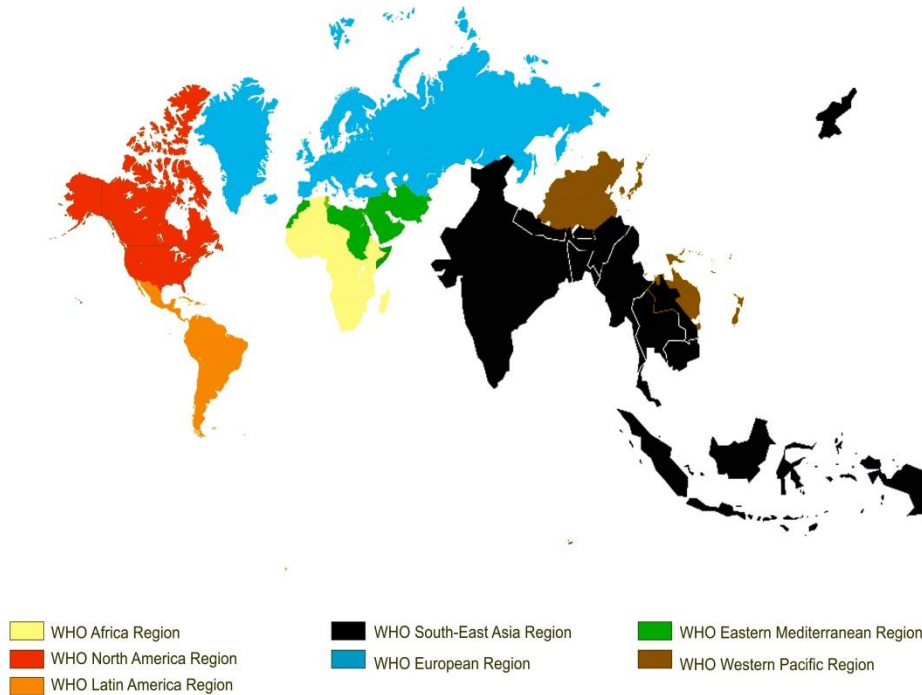
- **Ischaemic heart disease**
- **Stroke**
- **COPD**
- **LRI**
- **Diabetes mellitus**
- **Lung Cancer**
- **Road injury**
- **HIV/AIDS**
- **Diarrhea**
- **Hypertension**

AFRO: Mortality 2030



- HIV/AIDS
- LRI
- Stroke
- Heart Disease
- Diarrhea
- Road Injury
- Preterm Birth CX
- Malaria
- Diabetes
- Birth Asphyxia/Trauma

SEARO: Mortality 2030



- Ischaemic heart disease
- Stroke
- COPD
- LRI
- Diarrhea
- Diabetes mellitus
- Road injury
- Falls
- Self-harm
- Kidney diseases

PAHO: Mortality 2030



- Heart disease
- Stroke
- Diabetes mellitus
- Dementias
- COPD
- LRI
- Lung CA
- Hypertension
- Kidney diseases
- Interpersonal violence

Why Might We See This Scenario?

Mortality 2030

- Ischaemic heart disease
- Stroke
- COPD
- LRI
- Diabetes mellitus
- Lung Cancer
- Road injury
- HIV/AIDS
- Diarrhea
- Hypertension

DALYs 2030

- Depression
- Heart Disease
- Traffic Accidents
- Stroke
- COPD
- LRI
- Hearing & Vision Loss
- HIV/AIDS
- Diabetes Mellitus
- Diarrhea

Our GH Future in Chock-a-Block

Demographic shift =
increase in NCDs,
including dementias

Malaria, TB, HIV/AIDS,
NTDs, and (Re)Emerging
ID will still be with us.

Climate change and population growth
will increase competition for land and
water, increasing violence and conflict

Climate change will reduce
food supplies, increase
natural disasters, and
displace coastal populations

Gender inequity & child morbidity/mortality
will attenuate but still cause major harm.

Malnutrition, lack of hygiene/clean H₂O/sanitation,
And indoor/outdoor environmental pollution will
remain major underlying determinants of disease.

Increased development &
infrastructure = increased traffic &
other injuries.

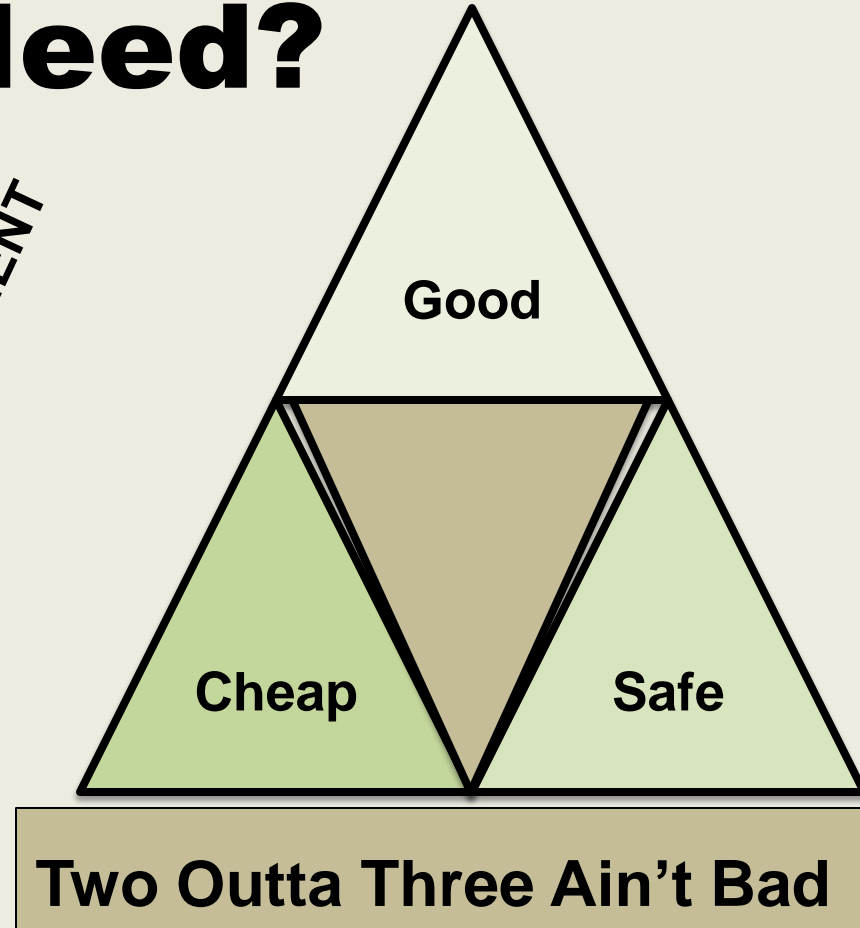
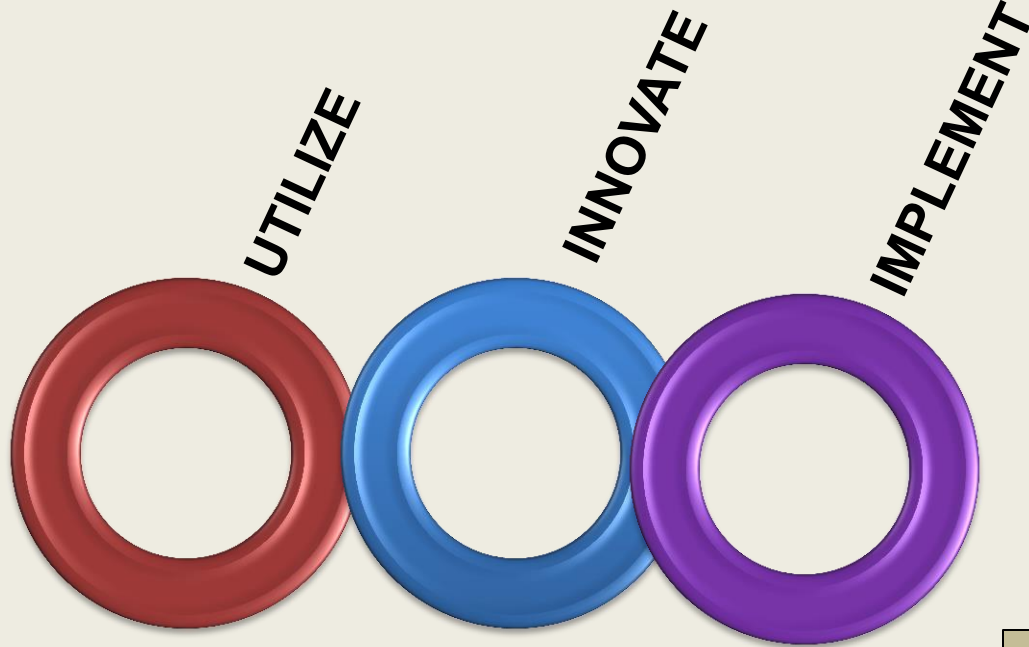
Take-Away:

- Future global health trends will see an increase in Type II and III disorders, with Type I disorders remaining a significant burden, especially in the Global South.

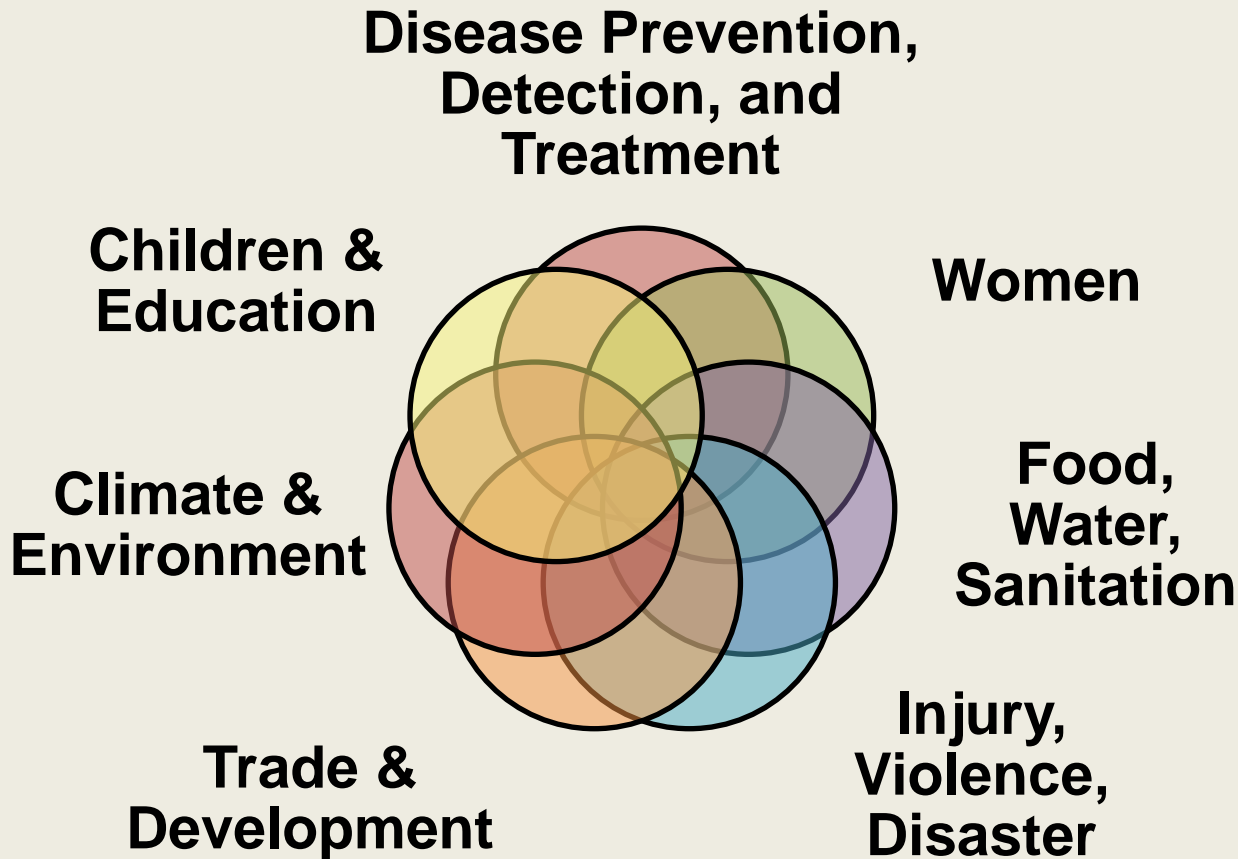
This Week's Questions:

- How will the GBD shift by 2030?
- **What are the best GH strategies to meet these shifts?**
- What is Dr. Boyd's secret weapon against the future GBD?

What Do We Need?



Strategic Focus Areas



Strategic

Focus

Disease Prevention, Detection, Treatment

- ✓ **Expanded Child Immunization (EPI), incl. pneumococcus & rotavirus**
- ✓ **More/Better TB Drugs & Case ID (inc. MDR)**
- ✓ **Access to cheap heart attack drugs (e.g. aspirin)**
- ✓ **Lay mental health counselors**

- ✓ **Malaria prevention packages (ITNs, DDT, education, drugs)**
- ✓ **Tobacco & soft drink taxes**
- ✓ **HIV prevention and early treatment, inc. male circumcision**
- ✓ **Investment in hospitals/systems**

Strategic Focus:

Disease Prevention, Detection, Treatment

- ✓ Increase R&D incentives & funding for HIV, malaria, NTD vaccines & medications, inc. simplified “delivery”
- ✓ Vector control, inc. preventing reproduction & maturation
- ✓ New technologies & mhealth for telemedicine & health promotion
- ✓ Old technologies: training traditional healers in primary prevention & researching traditional medicines

- ✓ Increased LMIC surgical capacity
- ✓ Hep B & C vaccines, detection, TX
- ✓ Education campaigns & regulation for sodium reduction
- ✓ Kangaroo care & breastfeeding
- ✓ Encourage innovation in products, design, strategies, delivery

Strategic Focus Areas

**Children's
Education**

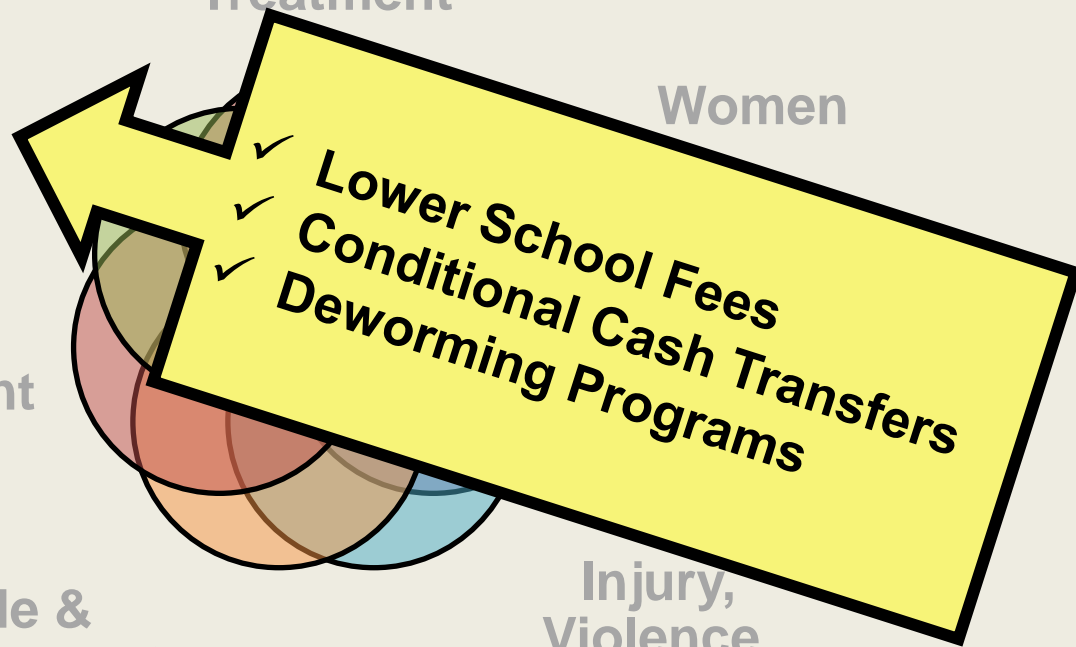
Disease Prevention,
Detection, and
Treatment

Women

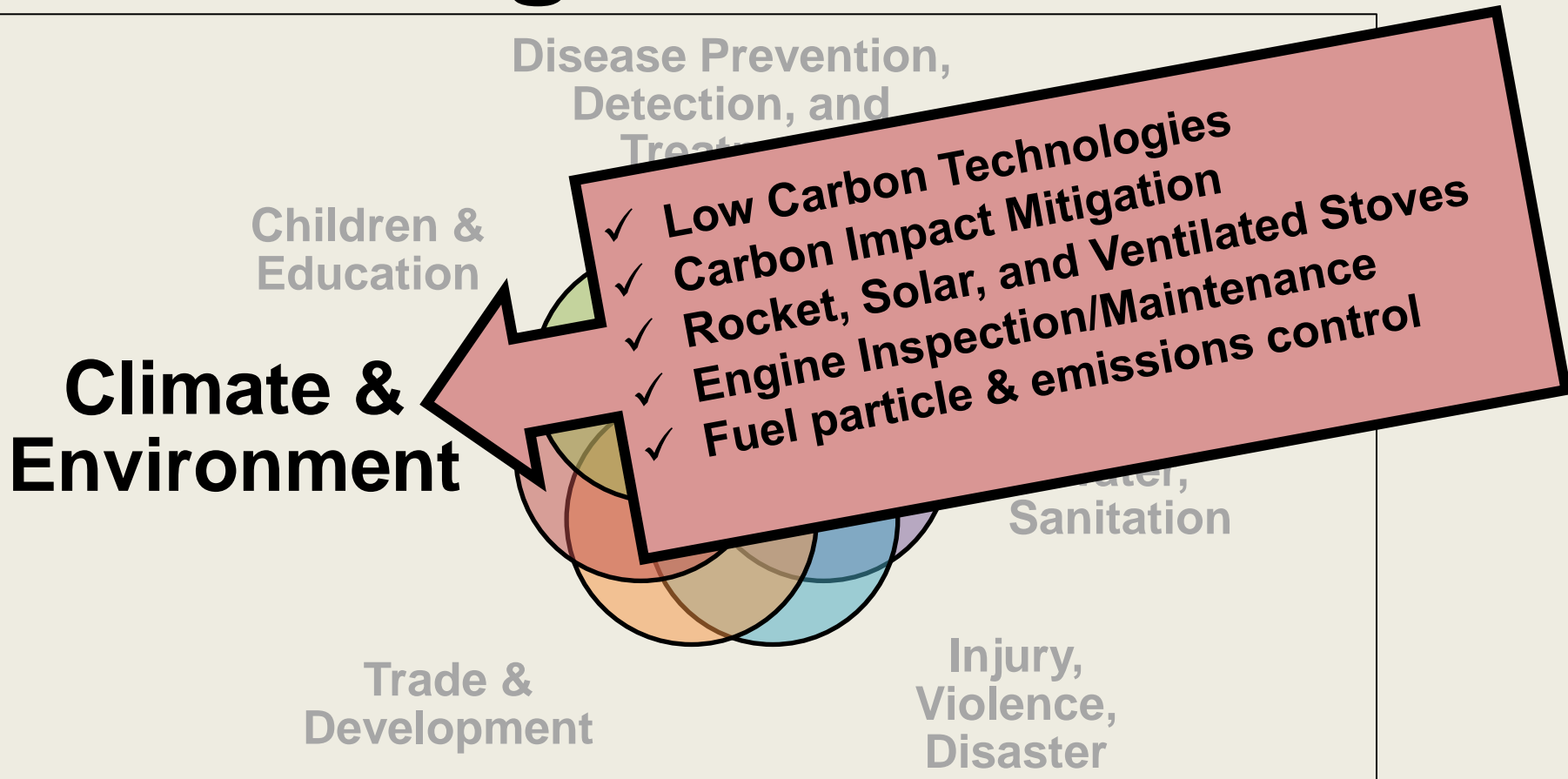
Climate &
Environment

Trade &
Development

Injury,
Violence,
Disaster



Strategic Focus Areas



Strategic Focus Areas

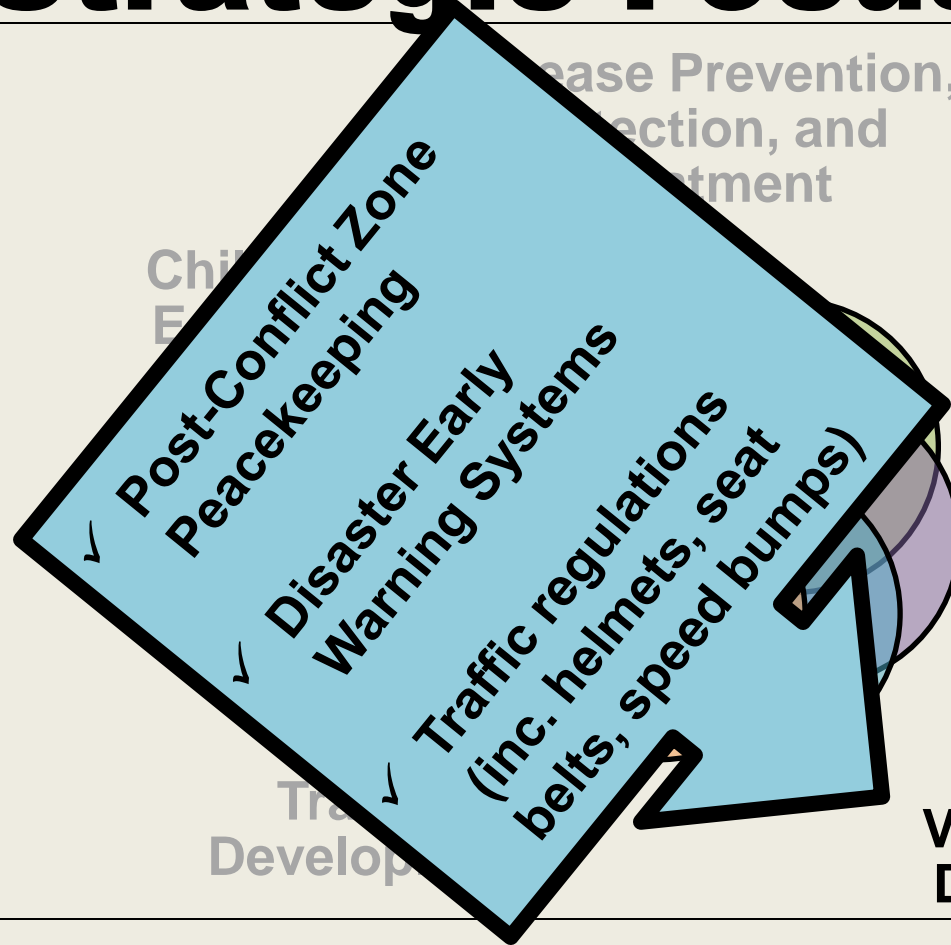
✓ Reducing tariffs and barriers to international trade and migration so that developing countries have better growth and development opportunities

**Trade &
Development**

Climate &
Environment

Injury,
Violence,
Disaster

Strategic Focus Areas



Disease Prevention,
Detection, and
Treatment

Child
Education

Women

Food,
Water,
Sanitation

Traffic
Development

Injury,
Violence,
Disaster

- ✓ **Micronutrient supplementation & fortification**
- ✓ **Biofortification for increased yields & nutrient density, disease & drought resistance**
- ✓ **Nutritional education campaigns**
- ✓ **Water filters (e.g. biosand) & chemical disinfection (e.g. chlorine dispensers)**
- ✓ **Increase Rural Water Access/Supply with deep boreholes and hand pumps**
- ✓ **Total Sanitation Campaigns, with education on handwashing & open defecation,**
- ✓ **Toilets (esp. composting ones)**

s Areas

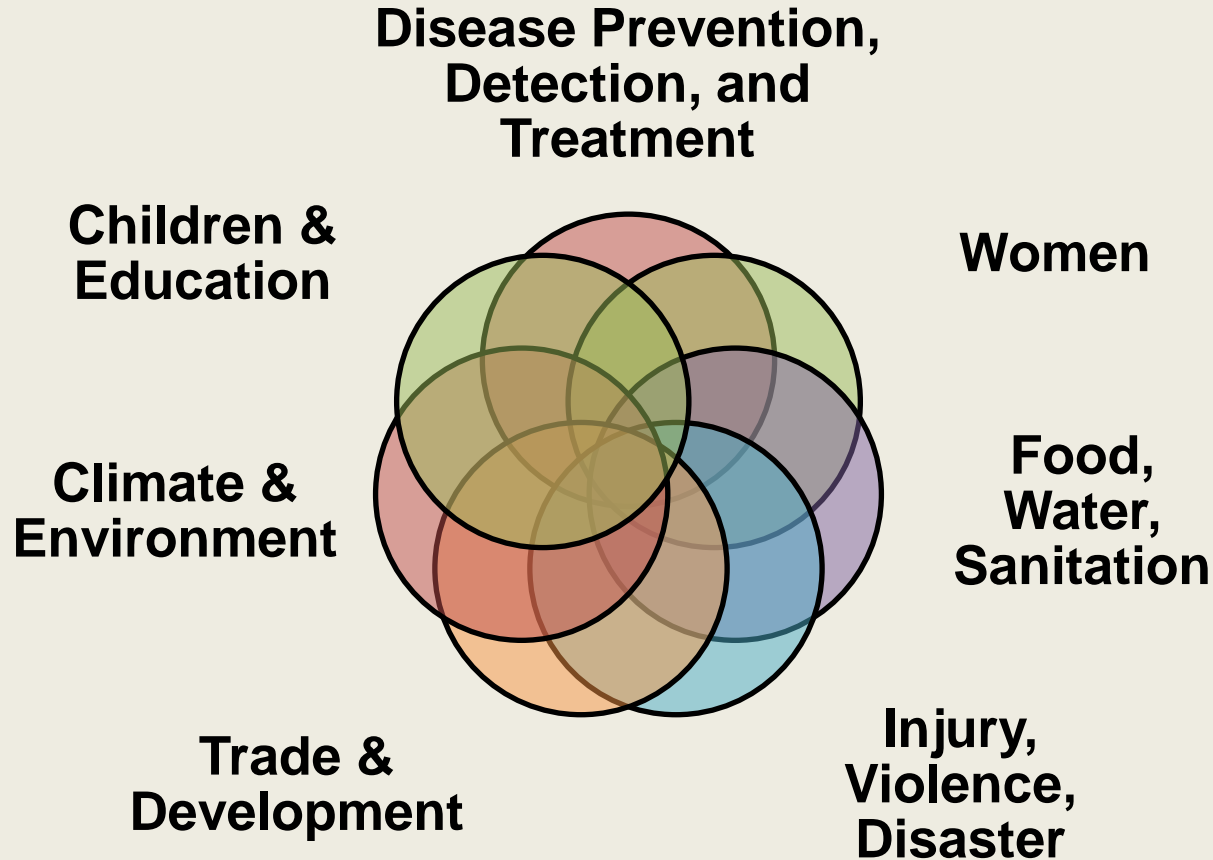


- ✓ Girl's Education (esp. SEARO & AFRO)
- ✓ Reproductive health and agency
- ✓ Microfinance
- ✓ Normalization of gender equity
- ✓ Prophylactic malaria TX in pregnancy
- ✓ Train/equip Skilled Birth Attendants
- ✓ HIV medications for PMTCT



WOMEN

Strategic Focus Areas



Global Health 2035:

A ‘Post MDG’ Grand Convergence for LMICs

The 16-8-4 ID Goal:

- Reduce child mortality rate (under-5) to 16/1000 live births
- Reduce AIDS deaths to 8/100,000 population
- Reduce TB deaths to 4/100,000 population
- Scale-up to prevent & treat HIV, TB, Malaria, NTDs, MCH
- Health system “diagonal approach” to target these burdens

Other Goals:

- Global: Increased R&D
- Global: Increased Externality Management and Preparedness
- LMIC: Higher tobacco & alcohol taxes
- LMIC: Reduce subsidies for fossil fuel and other air pollutant
- LMIC: Universal Health Coverage, beginning with free coverage for poor (‘progressive universalism’)

Global Health 2035:

A 'Post MDG' Grand Convergence for LMICs

The 16-8-4 ID Goal

- Reduce child mortality rate (under-5s) to 16/1000 live births
- Reduce AIDS deaths to 8/1000 population
- Reduce poverty to 4% of population

- **Costs: US \$60-\$80 billion dollars/year, 2016-2035.**
- **Middle Income Countries: Self-Funded**
- **Low Income Countries: Partial Assistance**
- **Estimated Economic Pay-off: over 9 to 1!**
- **Health: Responsible for +/- 25% of development!**
- **See www.globalhealth2035.org**

Health Coverage,
starting with free coverage for poor
(‘progressive universalism’)

Take-Away:

- Shifting trends in the GBD will require a concerted focus on all bio-psycho-social components, with an emphasis on utilization, innovation, and implementation to achieve a Grand Convergence in Global Health

This Week's Questions:

- How will the GBD shift by 2030?
- What are the best GH strategies to meet these shifts?
- **What is Dr. Boyd's secret weapon against the future GBD?**

This Week's Questions:

- **How will the GBD shift by 2030?**
- **What are the best GH strategies to meet these shifts?**
- **What is Dr. Boyd's secret weapon against the future GBD?**

This Week's Take-Aways:

- Future global health trends will see an increase in Type II and III disorders, with Type I disorders remaining a significant burden, especially in the Global South.
- Shifting trends in the GBD will require a concerted focus on all bio-psycho-social components, with an emphasis on utilization, innovation, and implementation.