

# Confronting Injury and Violence Globally: A Tale of Two Traumas

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# Injury/Violence Spectrums

**Road Traffic Injury**

**Sexual Violence Against Children**

**Cause of Trauma**

**Kinetic Energy**

**Physiological/Emotional Stress**

**Measuring the Problem**

**Official Data**

**Self-report**

**Prevention**

**Modify the Physical Environment**

**Modify the Social Environment and Behavior**



**Commission for  
Global Road Safety**

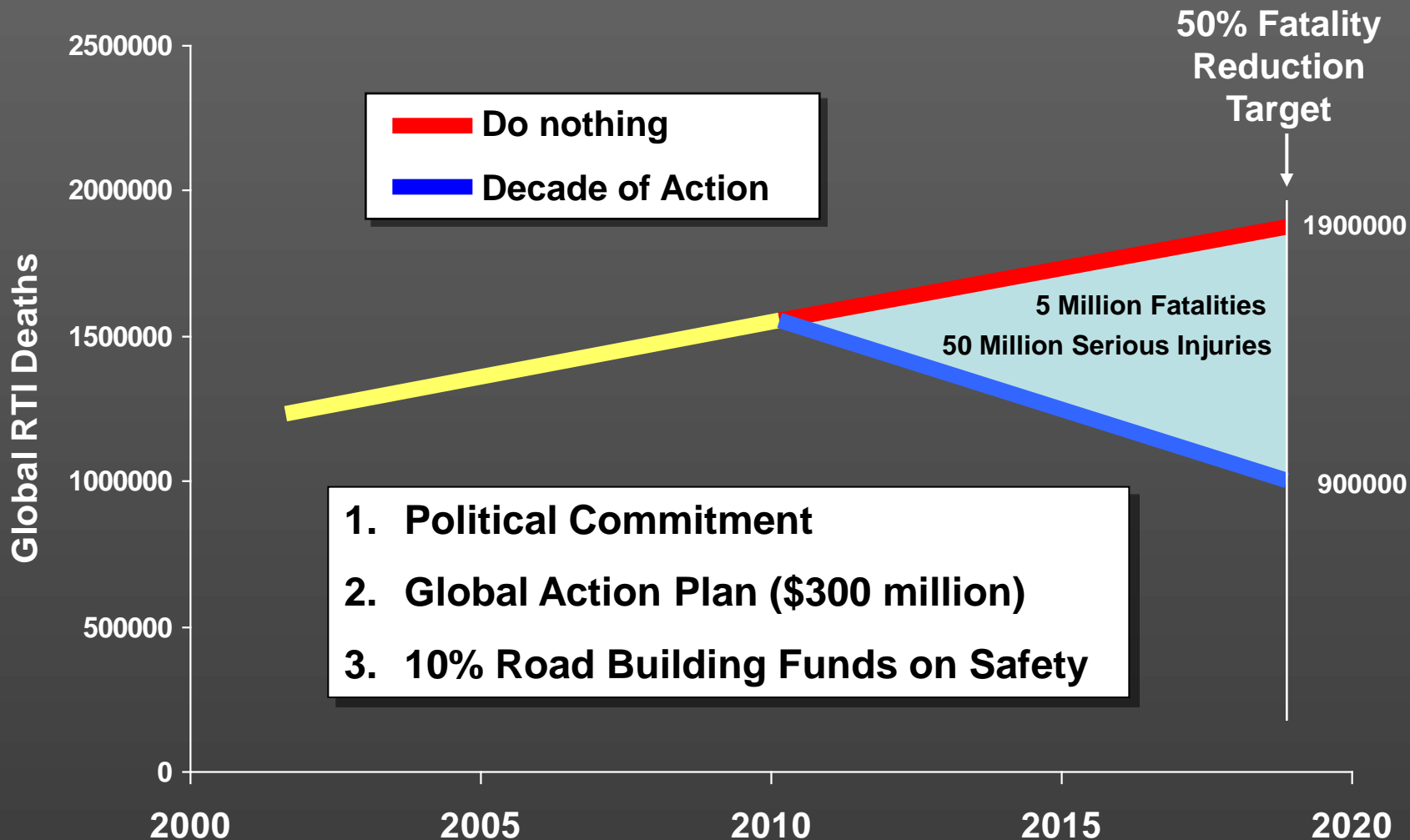


## **About the Commission:**

- **An independent High Level Commission under the Chairmanship of the former NATO Secretary General Lord Robertson with a member from each of the G8 countries and all major world regions;**
- **Supported by an expert advisory group including representatives from the WHO, World Bank, OECD, UNECE and NGOs;**
- **Funded by the FIA Foundation a UK registered charity established to promote road safety, the environment and sustainable mobility**



# A Decade of Action... Saving 5 Million Lives





# Together for girls

We can end sexual violence



United Nations  
Development Fund for Women



# Health Impact

# Global Burden of Road Traffic Injuries

A long, straight road stretching into the distance, flanked by green grass and a clear sky. The road is marked with white lines. In the center of the road, a line of bodies covered in white sheets extends from the foreground towards the horizon. Two bodies are visible in the foreground, one on the left and one on the right, both covered in white sheets. The overall scene is somber and evocative of a mass casualty event.

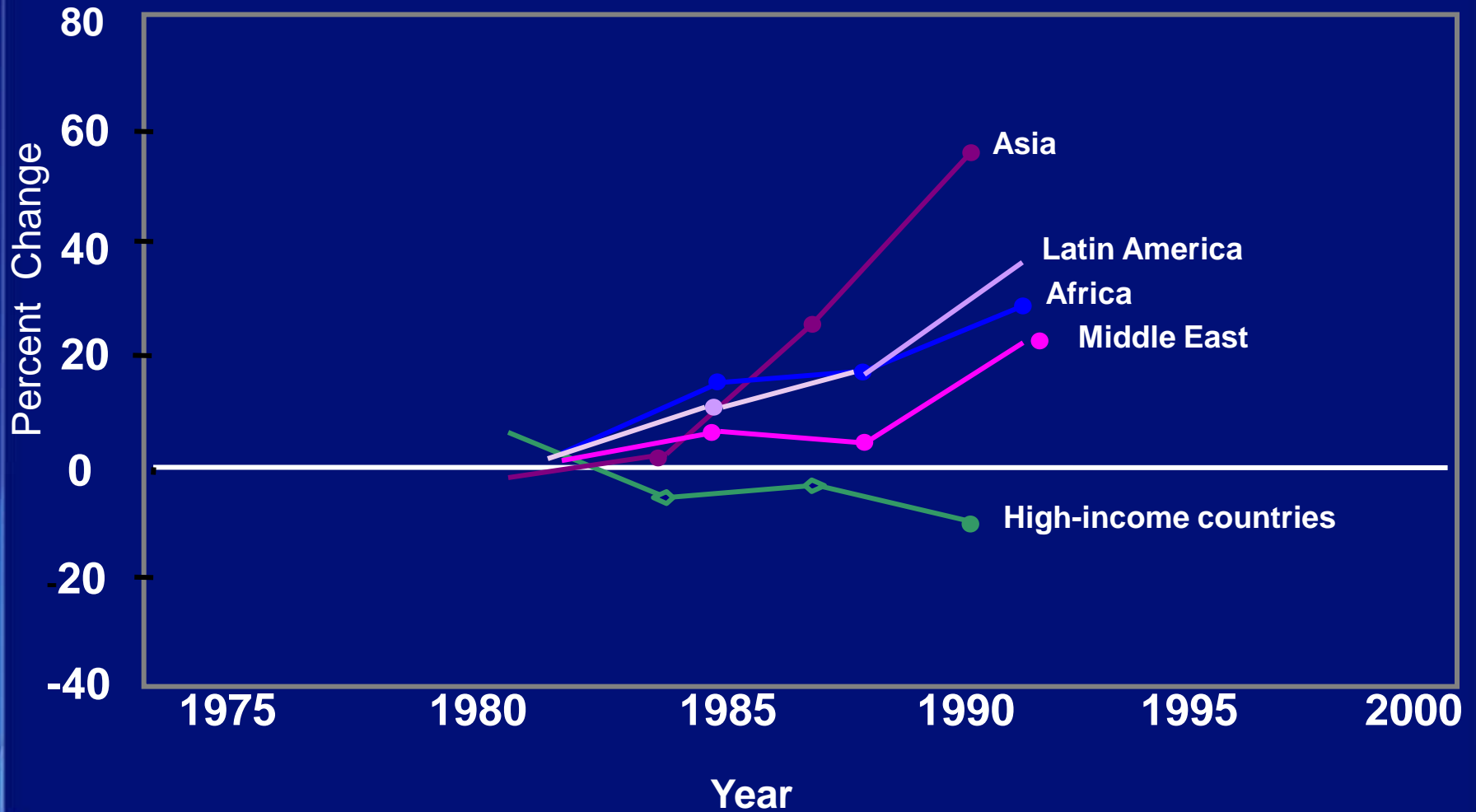
**1.2 million deaths each year**  
**9<sup>th</sup> leading cause of death**  
**2.1% of all deaths**  
**20-50 million injuries**



# Costs of Global Road Traffic Injuries

- **Every year, road traffic crashes cost an estimated:**
  - ◆ **US\$518 billion**
  - ◆ **US\$65 billion in low-income and middle-income countries**
  - ◆ **1% to 2 % of GNP in low-income and middle-income countries**
  - ◆ **2% of GNP in high-income countries**
- **Road traffic injuries put significant strain on health care budgets.**

# Change in Traffic Fatalities per 100,000



# Leading Causes of Death 2004 and 2030 Compared

TOTAL 2004

	LEADING CAUSE	%
1	Ischaemic heart disease	12.2
2	Cerebrovascular disease	9.7
3	Lower resp. infectious	7.0
4	Chronic obstr. pulmonary disease	5.1
5	Diarrhoeal diseases	3.6
6	HIV/AIDS	3.5
7	Tuberculosis	2.5
8	Trachea, bronchus, lung cancers	2.3
9	<b>Road traffic injuries</b>	2.2
10	Prematurity & low birth weight	2.0

TOTAL 2030

	LEADING CAUSE	%
1	Ischaemic heart disease	12.2
2	Cerebrovascular disease	9.7
3	Chronic obstr. pulmonary disease	7.0
4	Lower resp. infectious	5.1
5	<b>Road traffic injuries</b>	3.6
6	Trachea, bronchus, lung cancers	3.5
7	Diabetes mellitus	2.5
8	Hypertensive heart disease	2.3
9	Stomach cancer	2.2
10	HIV/AIDS	2.0



# **Global Burden of Sexual Violence Against Children**

**In 2002 150 million girls and 73 million boys had experienced sexual violence with physical contact**

**Source: Andrews et al., Child Sexual Abuse, WHO, 2004**

# Lifetime Prevalence of Child Sexual Abuse in High Mortality, Developing Regions of the World

Female %

Male %

Africa (High Mortality)

21.3

9.6

Africa (Very High Mortality)

42.7

29.8

Latin America/Caribbean

13.3

20.0

Eastern Mediterranean

28.0

11.5

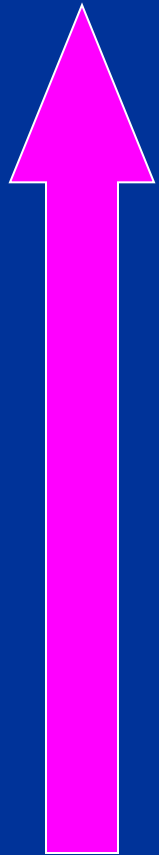
Southeast Asia

67.7

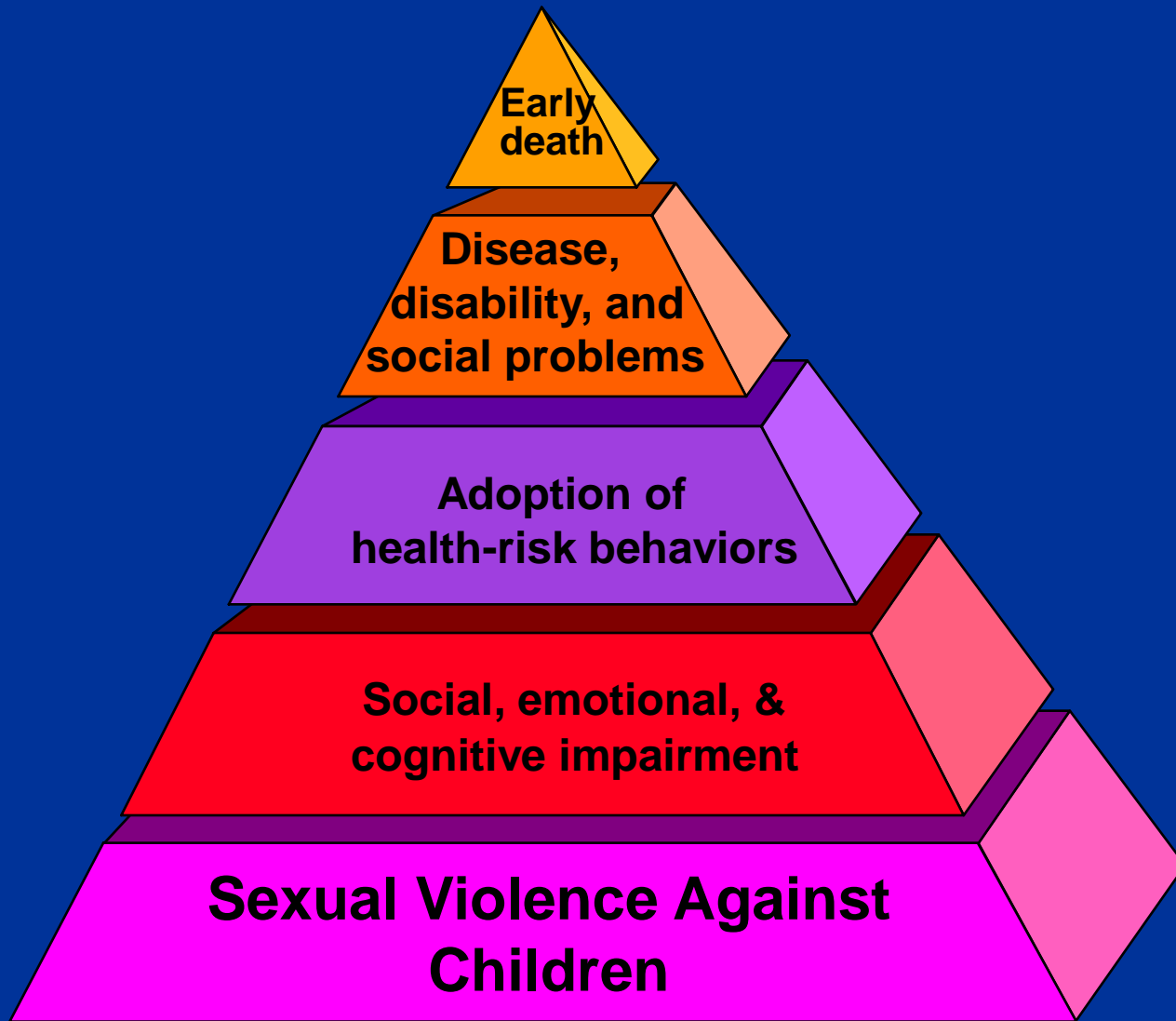
35.0

Source: Andrews et al., Child Sexual Abuse, WHO, 2004

**Death**



**Birth**



**The influence of sexual violence against children throughout life**

# Health Impacts of Sexual Violence Against Children

## Health-risk Behaviors

- Sexual promiscuity
- Sexual perpetration
- Alcohol abuse
- Illicit/injected drug use
- Smoking

## Disease and Injury

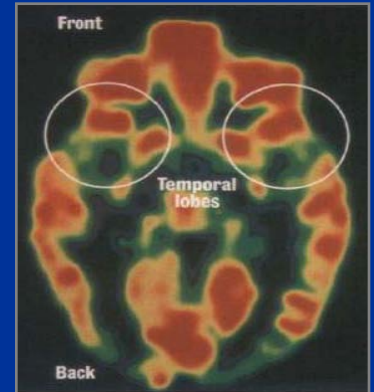
- STDs, including HIV
- Gynecological problems
- Heart disease
- Diabetes
- Stroke
- Cancer
- Suicide
- Hepatitis

## Mental health and well-being

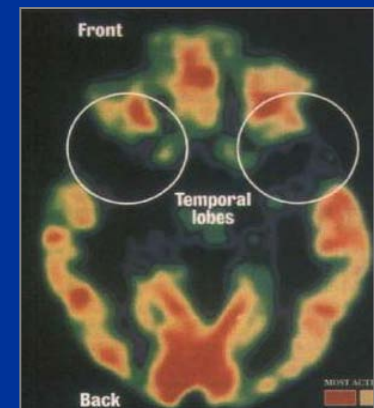
- Depression, post-traumatic stress disorder (PTSD)
- Aggression/Violence Perpetration
- Anxiety
- Somatic complaints
- Attempted suicide
- Social ostracism
- Anxiety
- Academic achievement
- Revictimization
- Unwanted pregnancy

# Toxic Stress Damages Brain Architecture

- Excessive and repeated stress causes the release of chemicals that impair cell growth and interfere with the formation of healthy neural circuits in the brain
- Toxic stress can damage the brain's stress response system and contribute to premature aging of the body



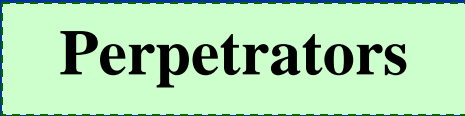
Healthy Brain



Abused Brain

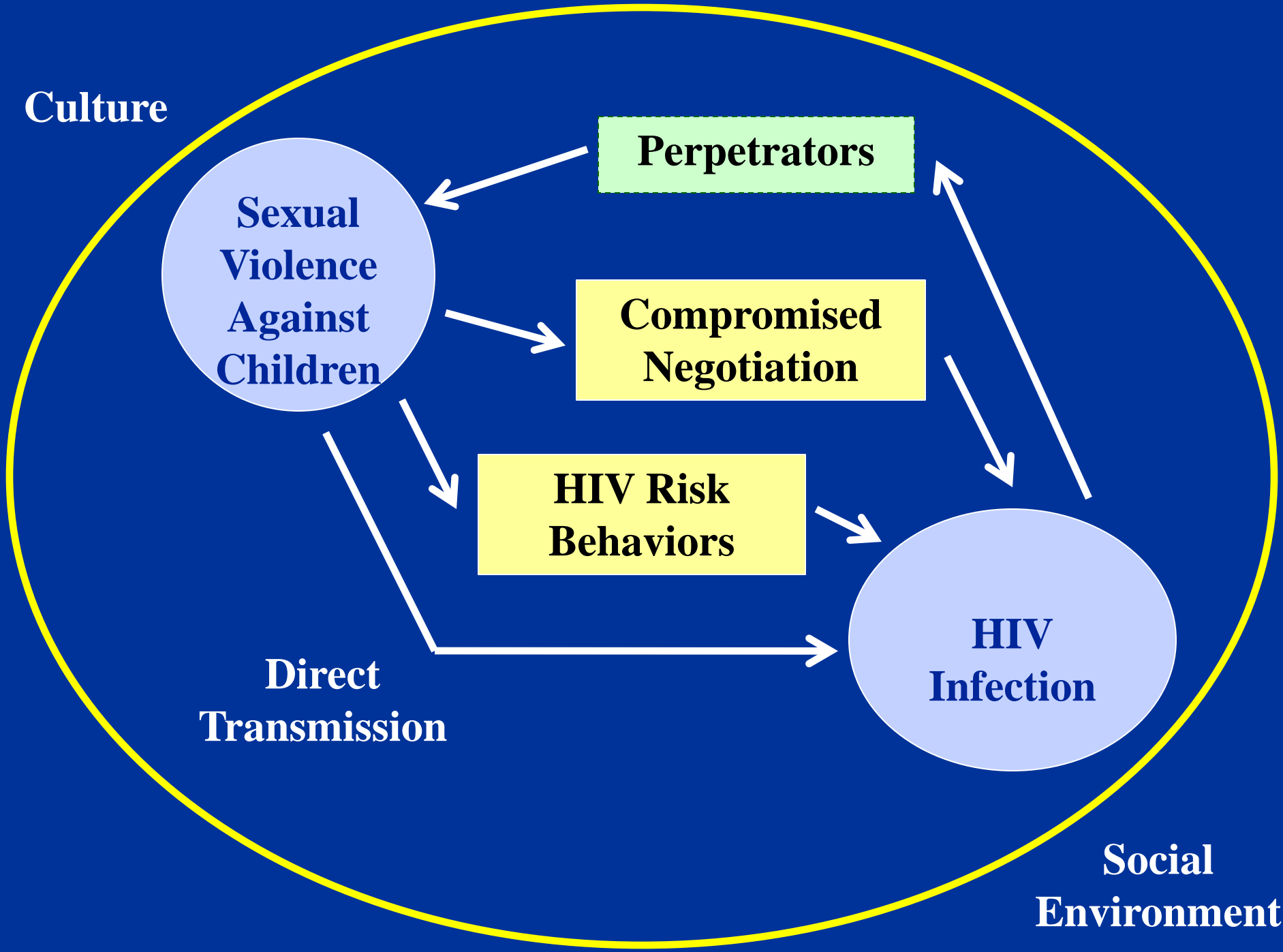


**Culture**



**Direct  
Transmission**

**Social  
Environment**



# Fraction of Mental Disorders and Suicidal Behavior Attributable to Child Sexual Abuse (CSA) by Sex

	Female %	Male %
Depression	7-8%	4-5%
Alcohol Use/Dependence	7-8%	4-5%
Drug Use/Dependence	7-8%	4-5%
Panic Disorder	13%	7%
PTSD	33%	21%
Suicide Attempts	11%	6%

Source: Andrews et al., Child Sexual Abuse, WHO, 2004

# Surveillance

# Road Traffic Data Sources

## Health/Medical

- Vital statistics (deaths)
- Hospitalizations
- Emergency dept visits

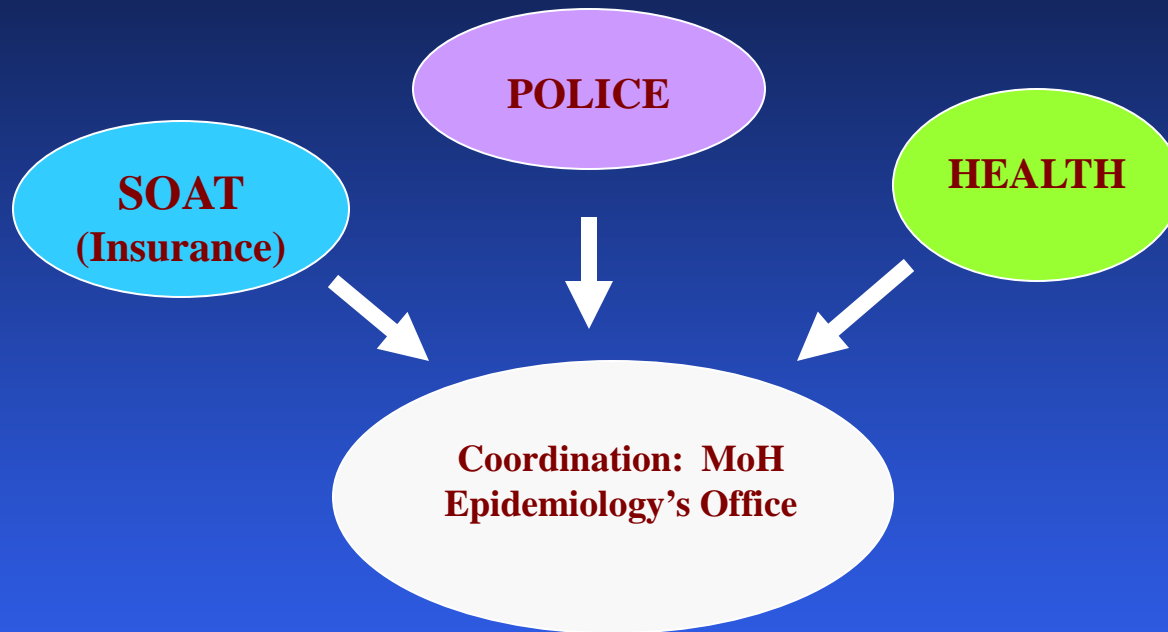
## Other

- Surveys--ask people
- Observations

## Traffic Safety/Police

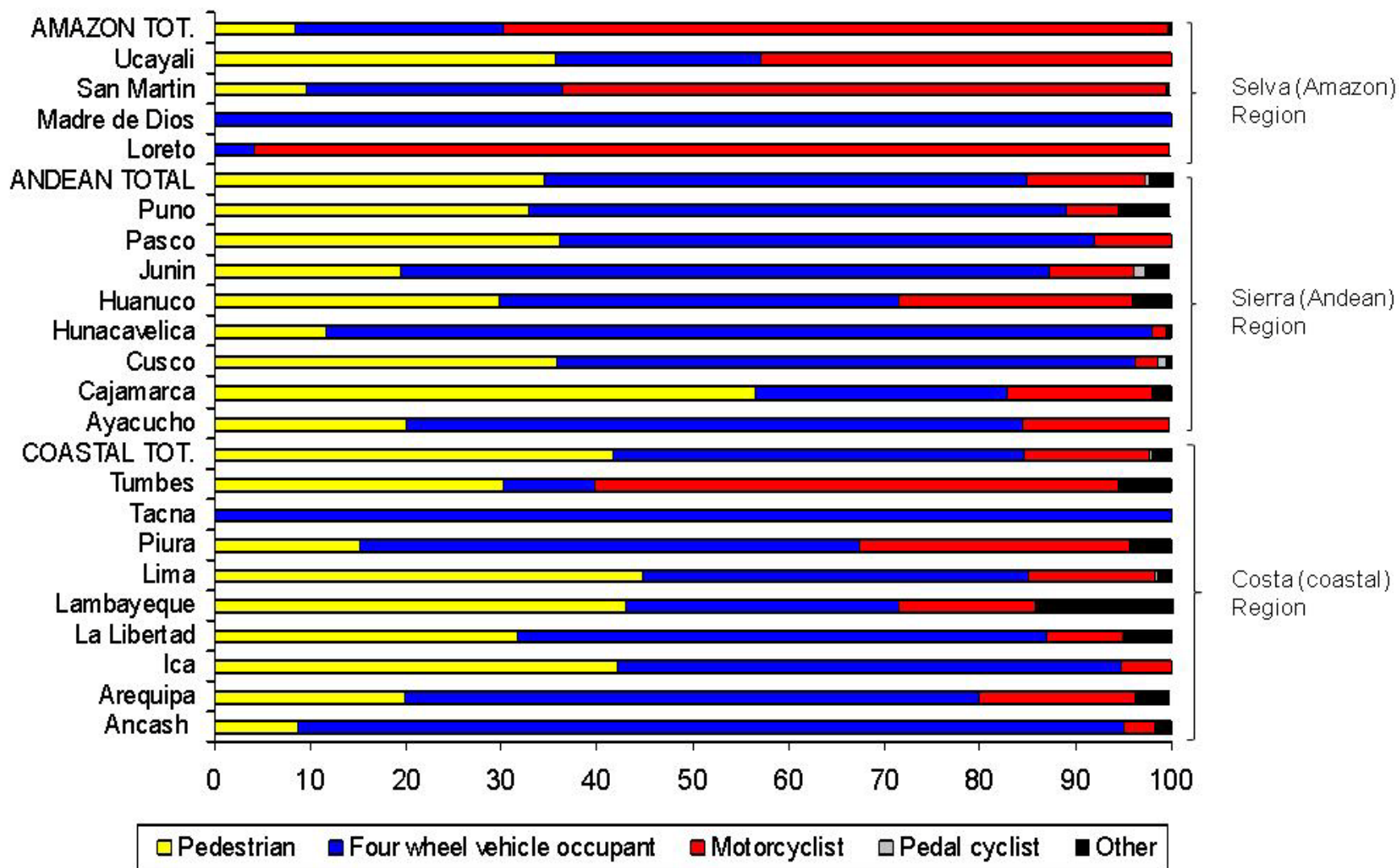
- Police accident reports
- Citations or tickets
- Licensing information
- Amount of travel
- Amount of travel by mode

# National Road Traffic Injury Surveillance System: Peru



In 2007, the Ministry of Health established a National Road Traffic National Injury Surveillance System

## Non-fatal road traffic injuries by road user type and state of sentinel unit, Peru Aggregated data from 23 states , 2007-2008



Note: Pedestrian: person injured while was walking; Four wheel vehicle occupant:: injured driver and /or passenger of the vehicle; Motorcyclist: injured driver and/or passenger of the motorcycle or motor-car; Pedal cyclist: person injured while riding a bicycle; Other: person injured as occupant of animal-drawn vehicle, animal cart, train, water transport, etc.

# Sexual Violence Against Children

## Data Sources

### Health/Medical

- Hospitalizations
- Emergency dept visits
- Reproductive health clinic data
- STD treatment data

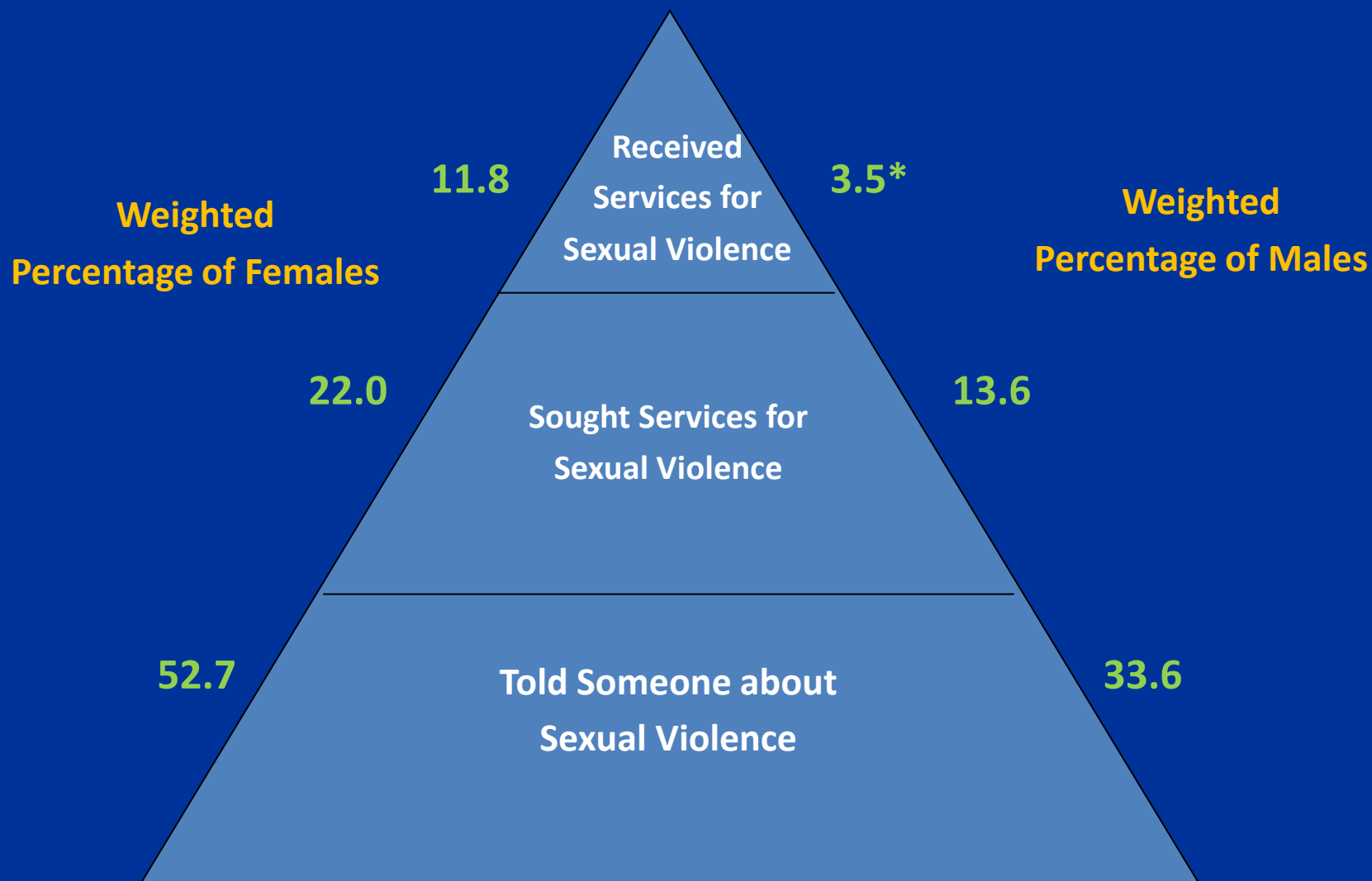
### Police/Social Service

- Police reports
- Child welfare service records
- School reports

### Other

- Surveys--ask people

# Help Seeking and Service Utilization Among Victims of Childhood Sexual Violence, Tanzania, 2009





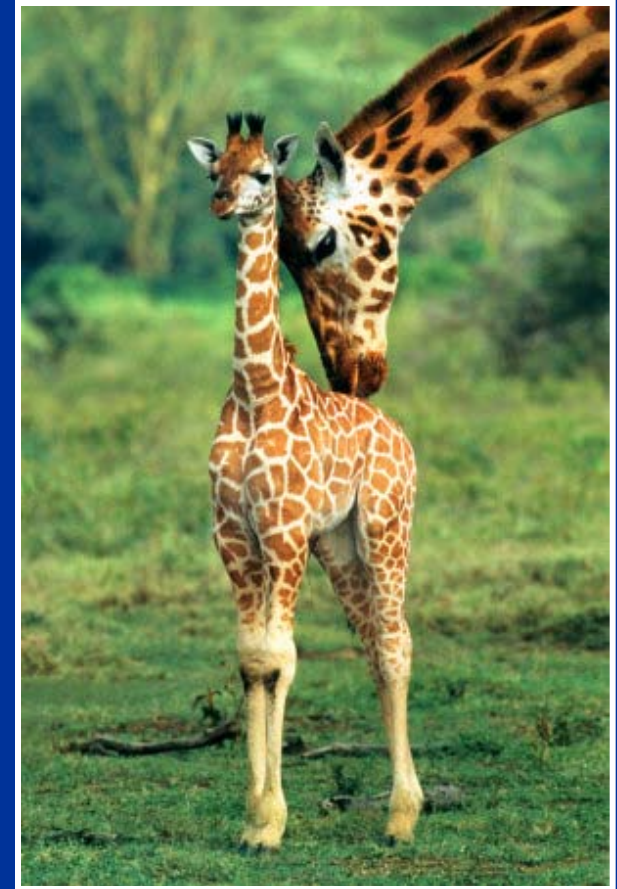
# Survey Method

- Household survey
- Three-stage cluster sample survey design
- Randomly select one eligible respondent aged 13-24 years in each household

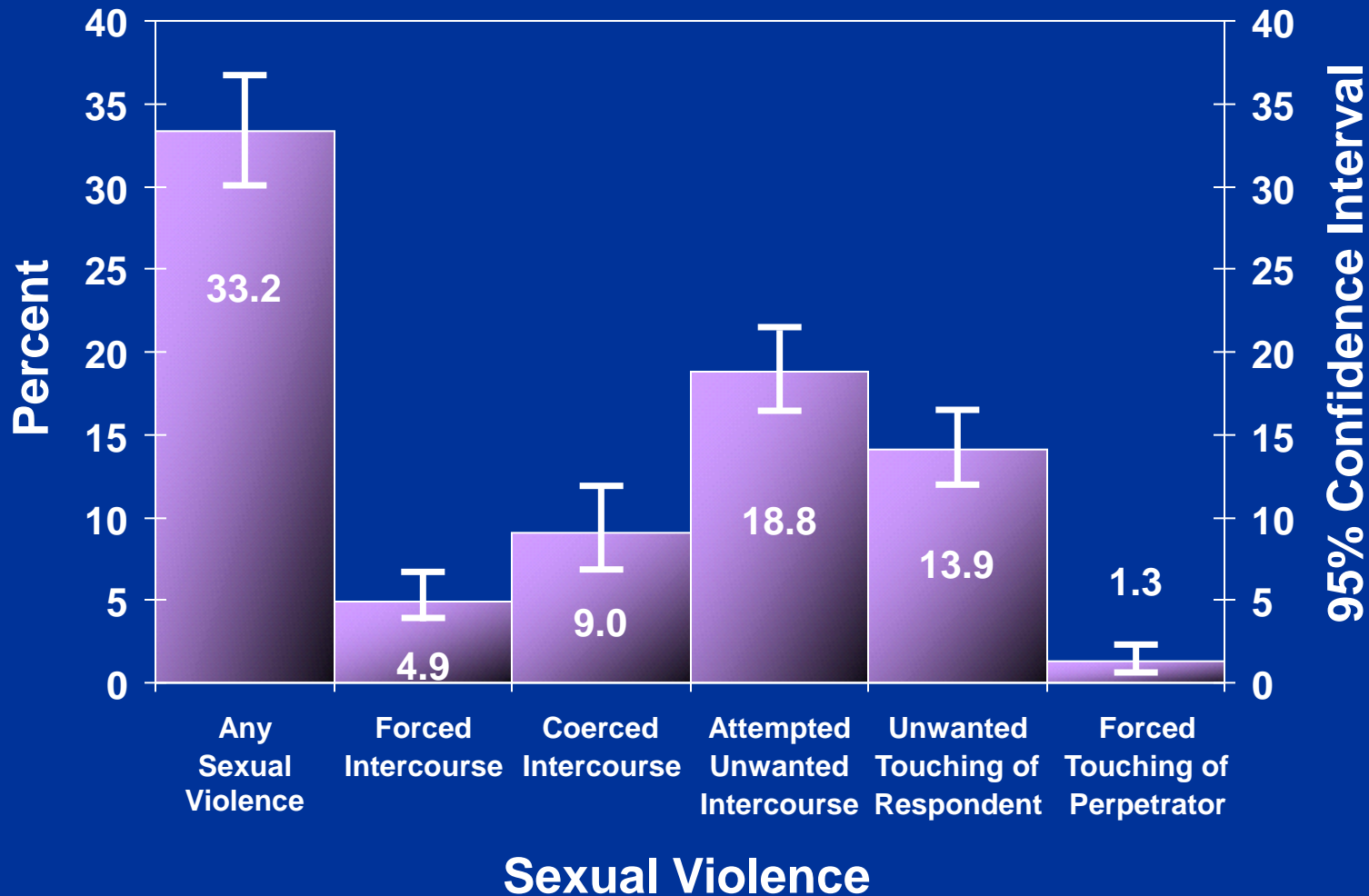


# Protecting Child Respondents

- **Conduct interviews in private with predefined procedure for handling interruptions and use same-sex interviewers**
- **One interview per household**
- **Provide a list of services to every respondent**
- **Have service agencies contact respondents who are upset or express a desire to get help**



# Sexual Violence Prior to age 18 Among Females 13-24 Years of Age, Swaziland 2007



# Prevention

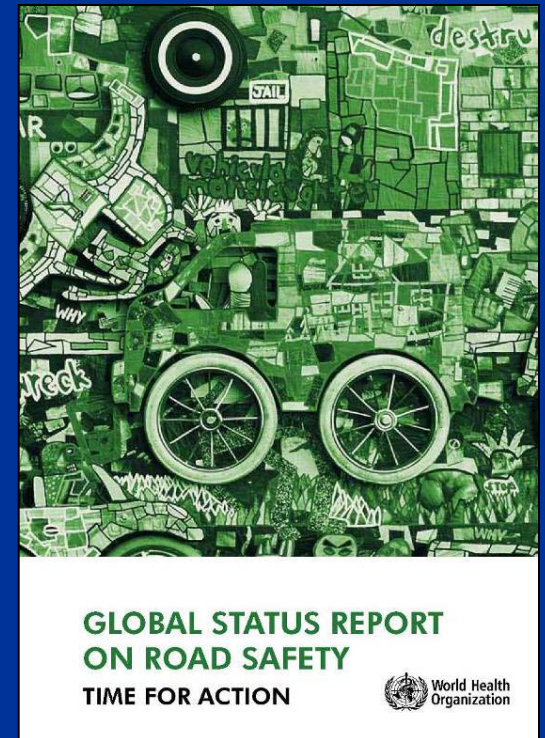
# Road Traffic Injury Intervention Package

- **Speed**
- **Impaired driving**
- **Seatbelts**
- **Helmets**
- **Roadway design**

# Contributing Factors

## Global Status Report – 2009

- 29% have urban speed limits below 30 mph
- Less than half of countries have a BAC law at 0.05 g/dL or below
- 43% lack primary seat belt laws that cover the driver and all passengers
- 60% of countries lack a universal motorcycle helmet law



# Success Story - Vietnam



**Before**



**After**

- ❑ 3% helmet use prior to the law
- ❑ 99% use after law (2007)
- ❑ Saved 1,000 lives to date, injuries down 25%
- ❑ Child helmet coverage began in 2009

# Roundabouts Save Lives





# Roundabouts are one of the new “vaccines for road safety”

- **80-90% reduction of fatal injuries compared to traditional intersections in Sweden**
- **As effective as our best vaccines**
- **Generally well accepted by citizens**

# Framework for Action to Address Sexual Violence Against Girls

- **Motivate and Sustain Political Will**
- **Promote Equitable Gender Relations and Protective Norms**
- **Create Safe Environments and Families**
- **Strengthen and Coordinate Response Systems**
- **Establish Systems for Monitoring and Evaluation**

# Safe Dates – School and Community-based Dating Violence Prevention Program

**Based on a RCT at 3-year follow-up:**

- **Reduced psychological, physical, and sexual dating violence perpetration**
- **Equally effective for males and females, whites and minority adolescents**
- **Effects were mediated by changes in dating violence and gender role norms and awareness of community services**

# Success Story in Progress: Swaziland

- National Awareness Campaign
- Sexual Offenses Unit for Children in Courts and Police Stations
- Sexual Offense Bill
- UNICEF's 2008 Plan of Work
- Community outreach

## Protection for sexual offense victims in Swaziland



© UNICEF Swaziland/2008/Phakathi

Swaziland's Chief Justice, Richard Banda, cuts the ribbon to open the country's first Sexual Offences Unit. Witnessing are (from left): Justice Monakgeng, UNICEF Representative Dr. Jama Gulaid and Ministry of Justice and Constitutional Affairs Principal Secretary Sicelo Dlamini.

By Jabulile Phakathi

MBABANE, Swaziland, 30 December 2008 – In response to concern about the alarming rates of violence against children documented in a 2007 national study conducted by UNICEF and the US Centers for Disease Control, Swaziland has established its first Sexual Offences Unit for children and young people.

Housed in the Magistrate's Court, the unit has a child-friendly interview room, offices

for five prosecutors and a resource centre for staff.

# A New Lever for Public Health





# For more information

Visit CDC's National Center for  
Injury Prevention and Control web site:

[www.cdc.gov/ncipc](http://www.cdc.gov/ncipc)



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# Disclaimer

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