

INT10: THE ROLE OF EPIDEMIOLOGY IN BUILDING RESPONSES TO VIOLENCE

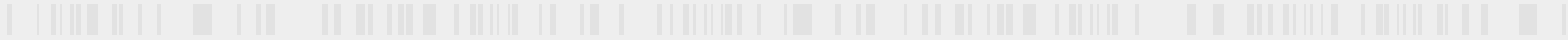
- Moderator: Richard Matzopoulos
- Speakers: Rodrigo Guerrero, Rachel Jewkes, Zinzi Bailey

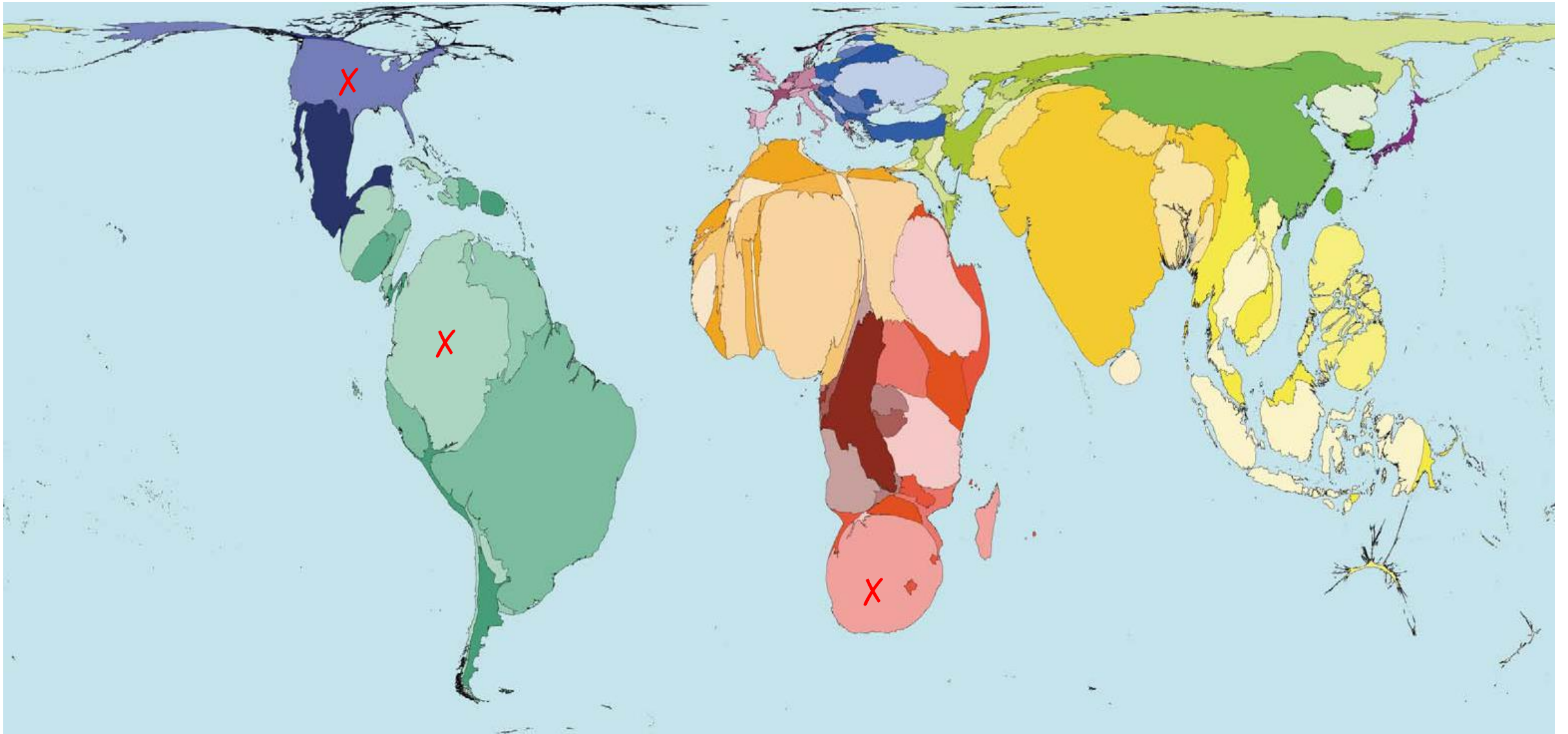
Friday, 27 September 2024

WORLD CONGRESS OF EPIDEMIOLOGY 2024

Cape Town International Convention Centre

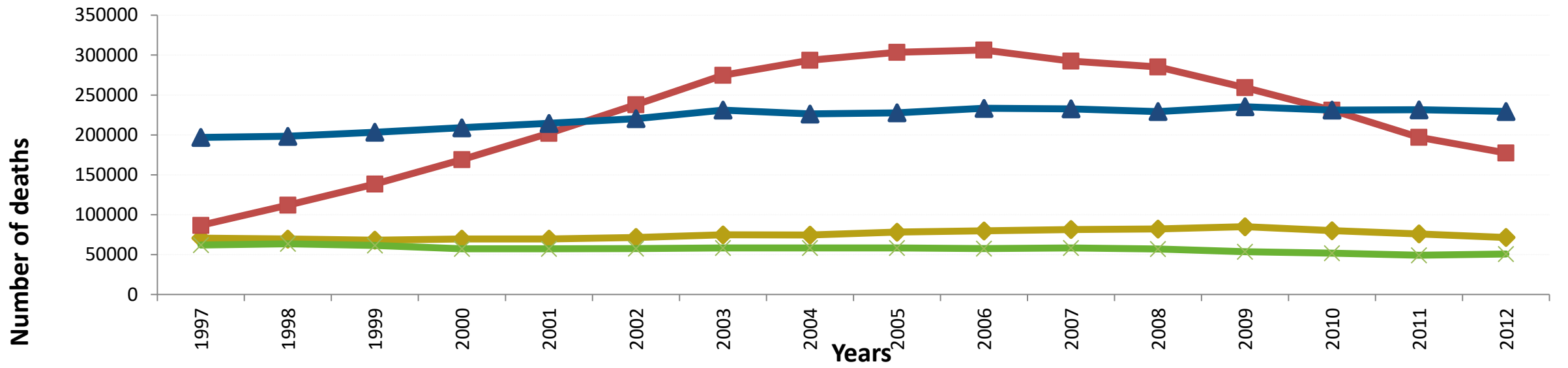






Source: www.worldmapper.org - Map no 291: Violent deaths; Global Burden of Injuries 2012, GBD-2010.

- What can we learn from the response to other diseases?
- What new methods and technologies can be applied to further the science?
- How can we better integrate what we already know about violence and its prevention in practice and in teaching curricula?



◆ Communicable diseases, maternal causes, perinatal conditions, nutrition deficiencies ■ HIV/AIDS and TB ▲ Non-communicable diseases ✕ Injuries

- Part of South Africa’s “quadruple burden”
 - 2nd leading **cause** of DALYS
- AND
- 2nd leading **risk factor** for DALYS across all causes

Rank	Disease, injury or condition	% DALYs
1	HIV/AIDS	30.9
2	Interpersonal violence	6.5
3	Tuberculosis	3.7
4	Road traffic injuries	3.0
5	Diarrhoeal diseases	2.9
6	Lower respiratory infections	2.8
7	Low birth weight	2.6
8	Asthma	2.2
9	Stroke	2.0
10	Unipolar depressive disorders	2.0
Top 10 causes		58.6
Total		100.0

Rank	Risk factor	% DALYs
1	Unsafe sex	31.5
2	Interpersonal violence	8.4
3	Alcohol harm	7.0
4	Tobacco smoking	4.0
5	High BMI (excess body weight)	2.9
6	Childhood and maternal underweight	2.7
7	Unsafe water sanitation and hygiene	2.6
8	High blood pressure	2.4
9	Diabetes (risk factor)	1.6
10	High cholesterol	1.4

Violence Epidemiology AT WCE

Posters - 7 / 773



Search “violen*”

Orals – 6 / 317 in 3 sessions

03-26: Emerging issues in epidemiology

Overview

Oral abstracts

Early life factors associated with childhood trajectories of violence among the Birth to Twenty-Plus Cohort in Soweto, South Africa



Lilian Muchai
University of the Witwatersrand

Understanding the pathways between INSPIRE-aligned provisions and sexual violence outcomes in adolescence: a South African cohort analysis



Nontokozi Langwenya
University of Oxford

03-21: Social epidemiology

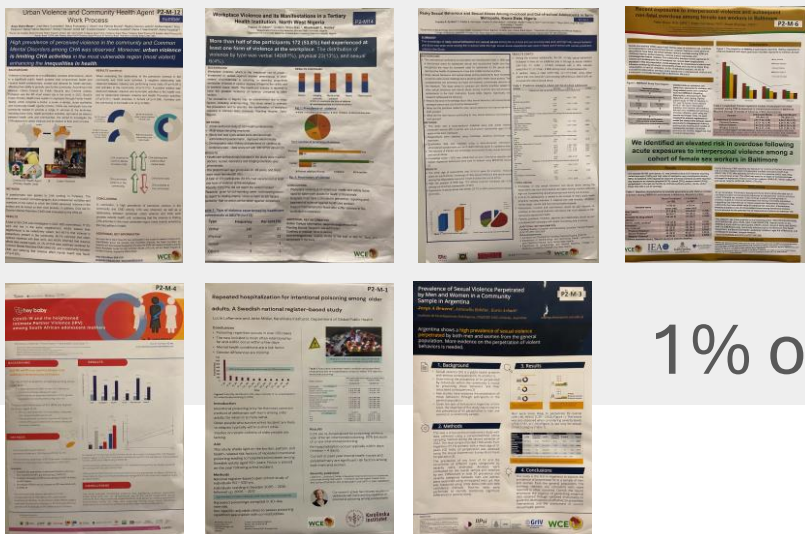
Friday, September 27, 2024

9:30 - 11:30

A dyadic analysis of violence exposure through parental disciplinary practices in a population-based cohort



Mariana Amorim
University of Porto



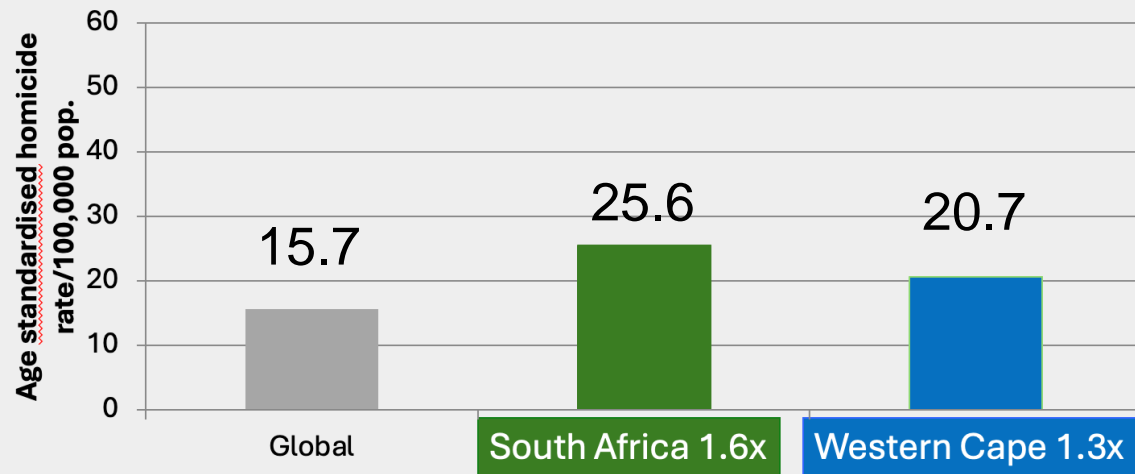
1% of all posters*

2% of all oral presentations*

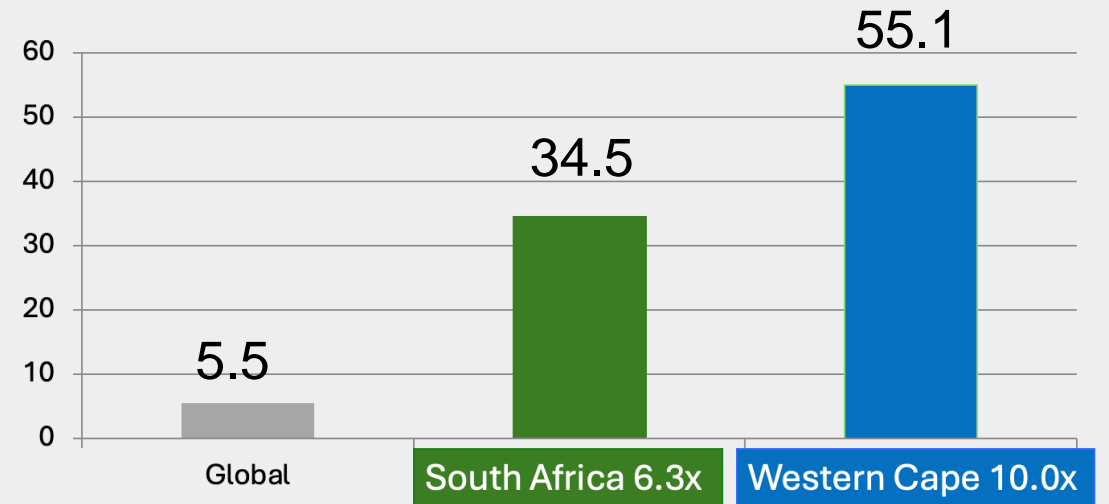
* Rounded up!

South Africa has an injury, but particularly a violence epidemic

Road traffic mortality (2017)



Homicide (2017)



A few broad strategies to address violence

1. Gender-based violence
 - Generally understood to focus on women
2. Violence against children (esp UNICEF)
3. Social determinant (via Commission on the Social Determinants of Health)

The INSPIRE technical package

INSPIRE

Seven Strategies for Ending Violence Against Children



INSPIRE Handbook

Action for implementing the seven strategies for ending violence against children

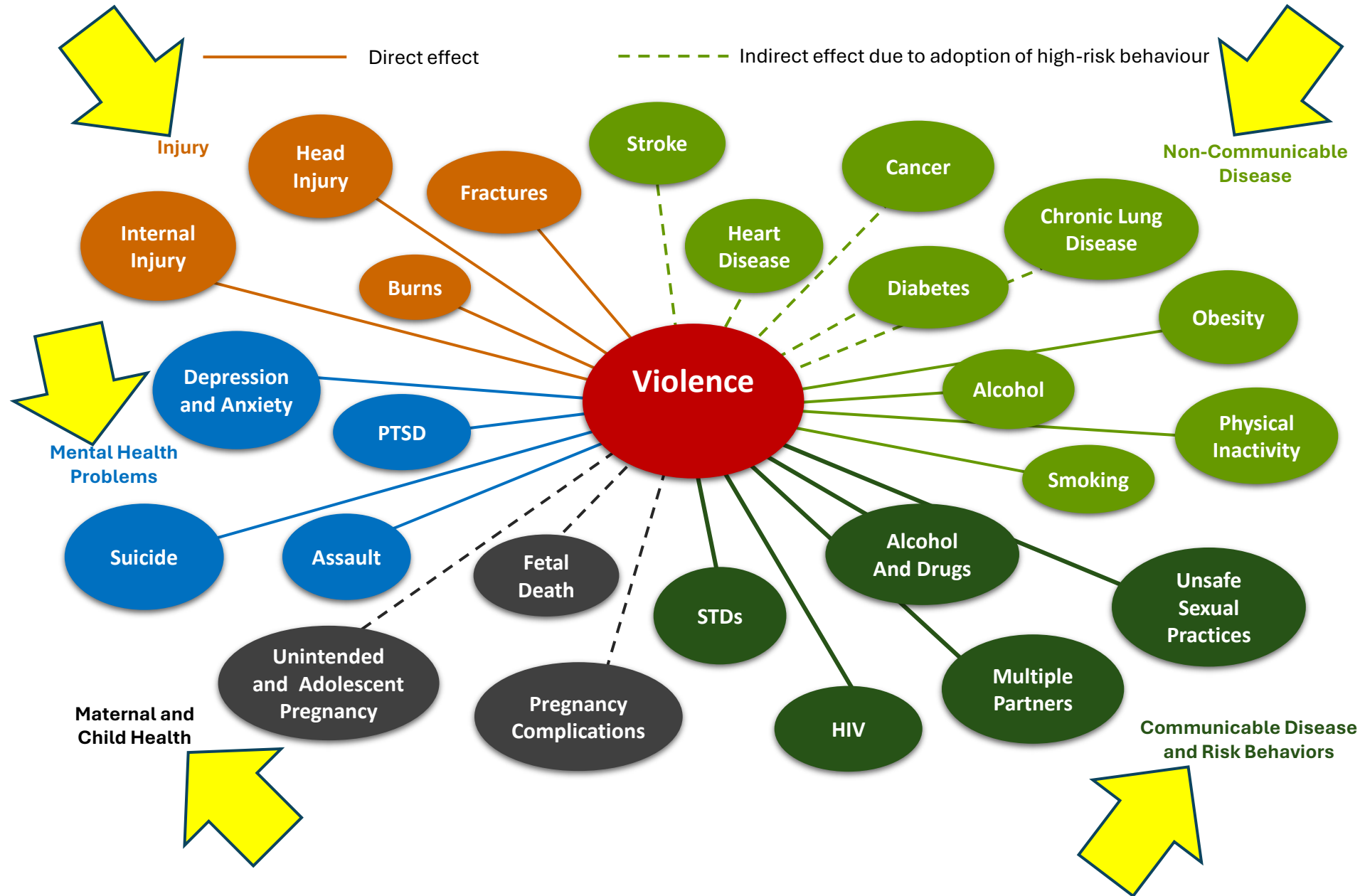









INSPIRE Indicator Guidance and Results Framework

Ending Violence Against Children: How to define and measure change



Health consequences of violence against children



Strategy	Approach	Sectors	Cross-cutting activities	
 Implementation and enforcement of laws	<ul style="list-style-type: none"> • Laws banning violent punishment of children by parents, teachers or other caregivers • Laws criminalizing sexual abuse and exploitation of children • Laws that prevent alcohol misuse • Laws limiting youth access to firearms and other weapons 	Justice	Multisectoral actions and coordination	
 Norms and values	<ul style="list-style-type: none"> • Changing adherence to restrictive and harmful gender and social norms • Community mobilization programmes • Bystander interventions 	Health, Education, Social Welfare		
 Safe environments	<ul style="list-style-type: none"> • Reducing violence by addressing "hotspots" • Interrupting the spread of violence • Improving the built environment 	Interior, Planning		
 Parent and caregiver support	<ul style="list-style-type: none"> • Delivered through home visits • Delivered in groups in community settings • Delivered through comprehensive programmes 	Social Welfare, Health		
 Income and economic strengthening	<ul style="list-style-type: none"> • Cash transfers • Group saving and loans combined with gender equity training • Microfinance combined with gender norm training 	Finance, Labour		
 Response and support services	<ul style="list-style-type: none"> • Counselling and therapeutic approaches • Screening combined with interventions • Treatment programmes for juvenile offenders in the criminal justice system • Foster care interventions involving social welfare services 	Health, Justice, Social Welfare		Monitoring and evaluation
 Education and life skills	<ul style="list-style-type: none"> • Increase enrolment in pre-school, primary and secondary schools • Establish a safe and enabling school environment • Improve children's knowledge about sexual abuse and how to protect themselves against it • Life and social skills training • Adolescent intimate partner violence prevention programmes 	Education		

2011

5th Milestones of Global Campaign for Violence Prevention

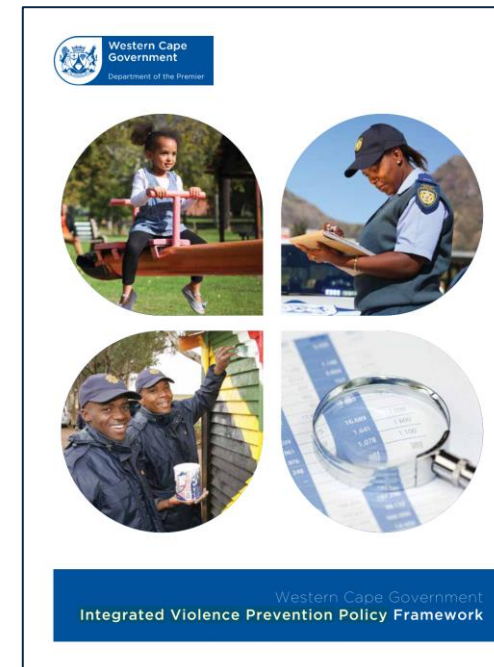
- Included 200 leading experts from around the world
- Hosted in Cape Town by WCG and National DoH

The absence of an overarching strategy was highlighted as a weakness



2013

1. blends *public health and whole-of-society* approach
2. *evidence-led* interventions
3. institutionalised *monitoring and evaluation*
4. reliable surveillance to focus *on high-risk areas*



2014



ELSEVIER

Contents lists available at [ScienceDirect](#)

Aggression and Violent Behavior



The Western Cape Government's new Integrated Provincial Violence Prevention Policy Framework: Successes and challenges

Richard Matzopoulos^{a,b,*}, Jonathan E. Myers^a

^a University of Cape Town, School of Public Health and Family Medicine, South Africa

^b Medical Research Council of South Africa, Burden of Disease Research Unit, South Africa



1. Engaging the *whole-of-society* ✓ X
2. Focus on high-risk areas ✓ ✓
3. **Evidence-led interventions** X X
4. Monitoring and evaluation ✓ X

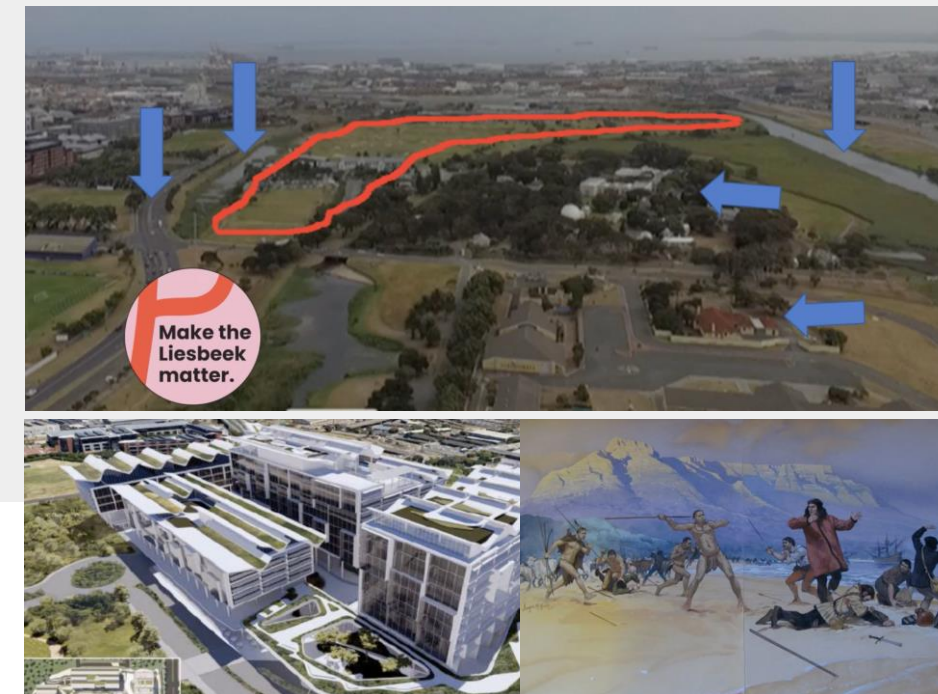
Western Cape government has consolidated focus on high-risk areas in its Safety Plan:

- Additional law enforcement using health surveillance data to target high risk times and neighbourhoods.
- Area-based inter-sectoral teams to address localised safety challenges and strengthening referral pathways

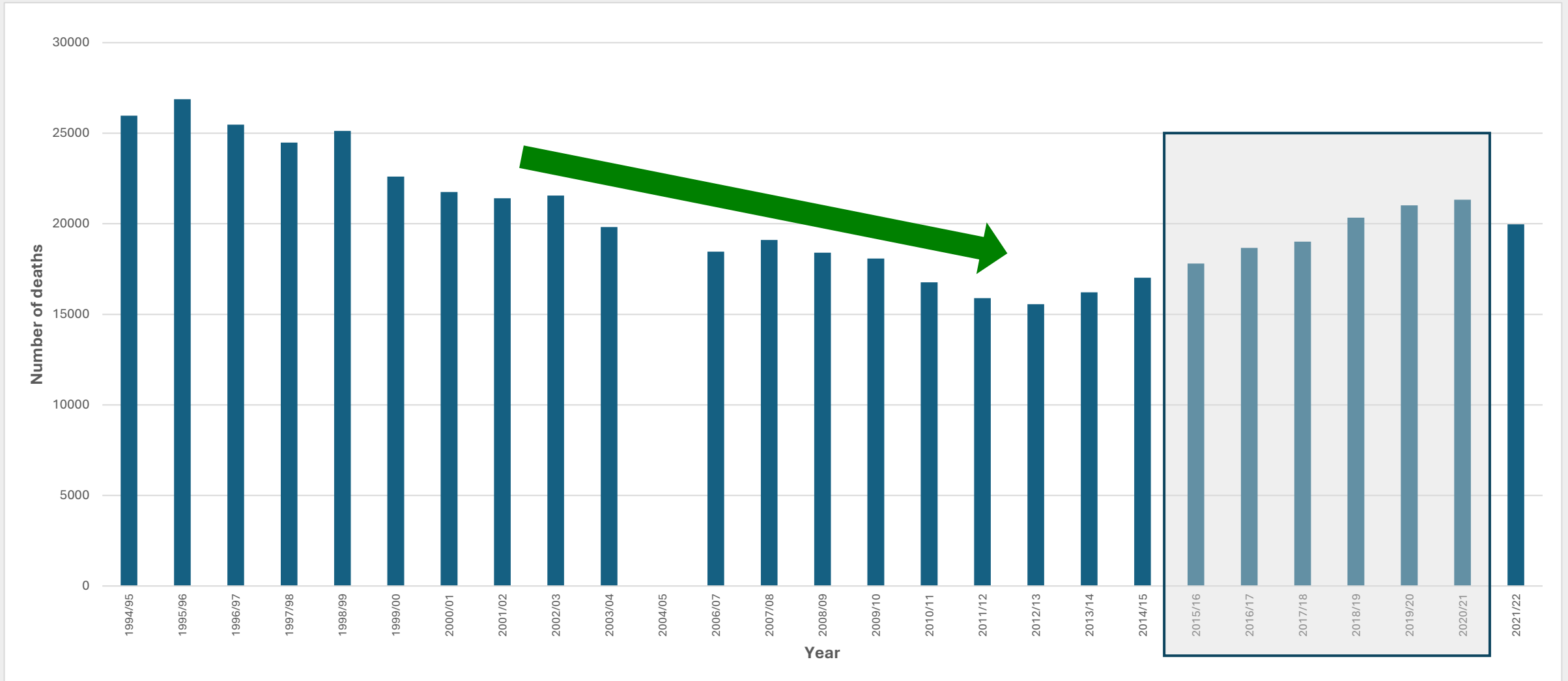


Infrastructure development is still skewed to affluent areas:

- World Cup Stadium built in unsuitable precinct close to congested city centre
- Recent Amazon development on site of proposed Two Rivers Urban Park – AND site of 1st (and successful) resistance by indigenous people against colonisers

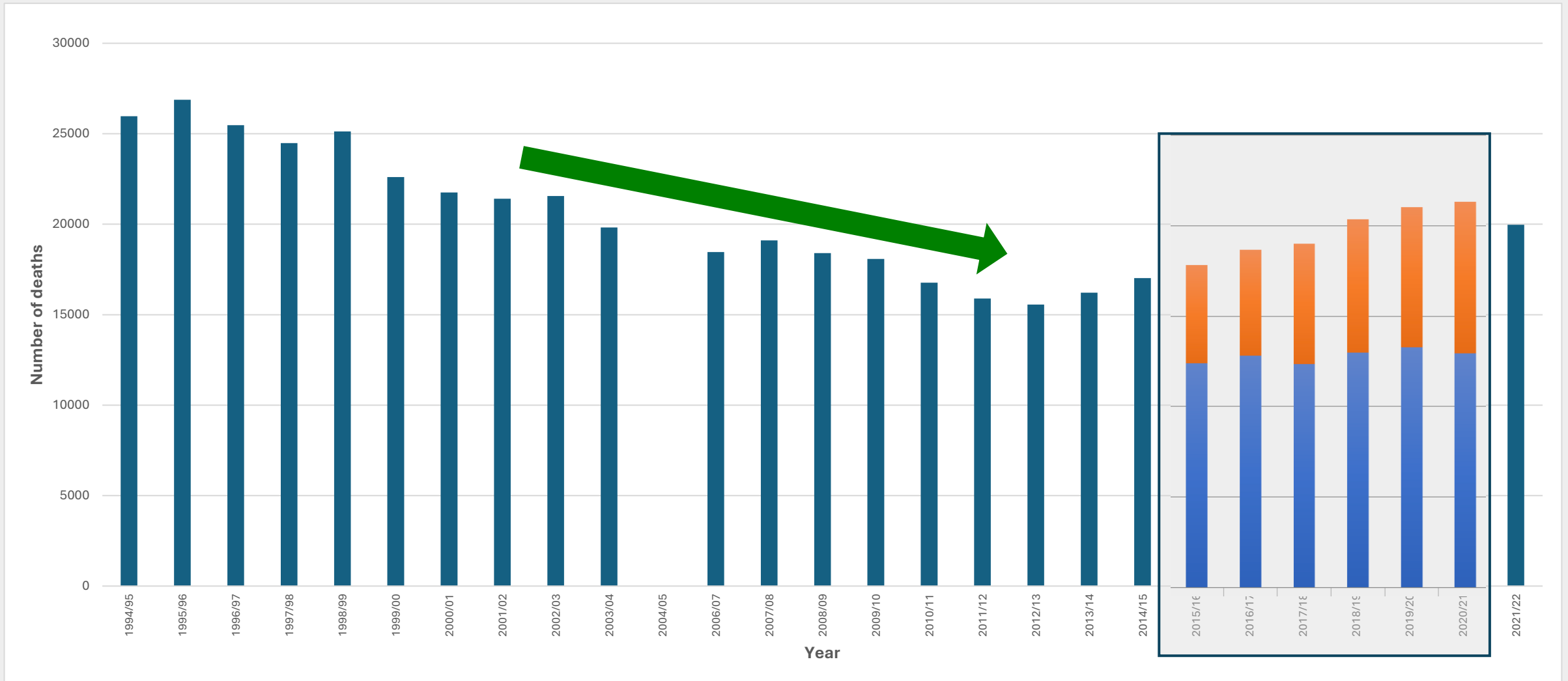


Annual murder counts have fluctuated in the last 25 years – police data, 1994-2021

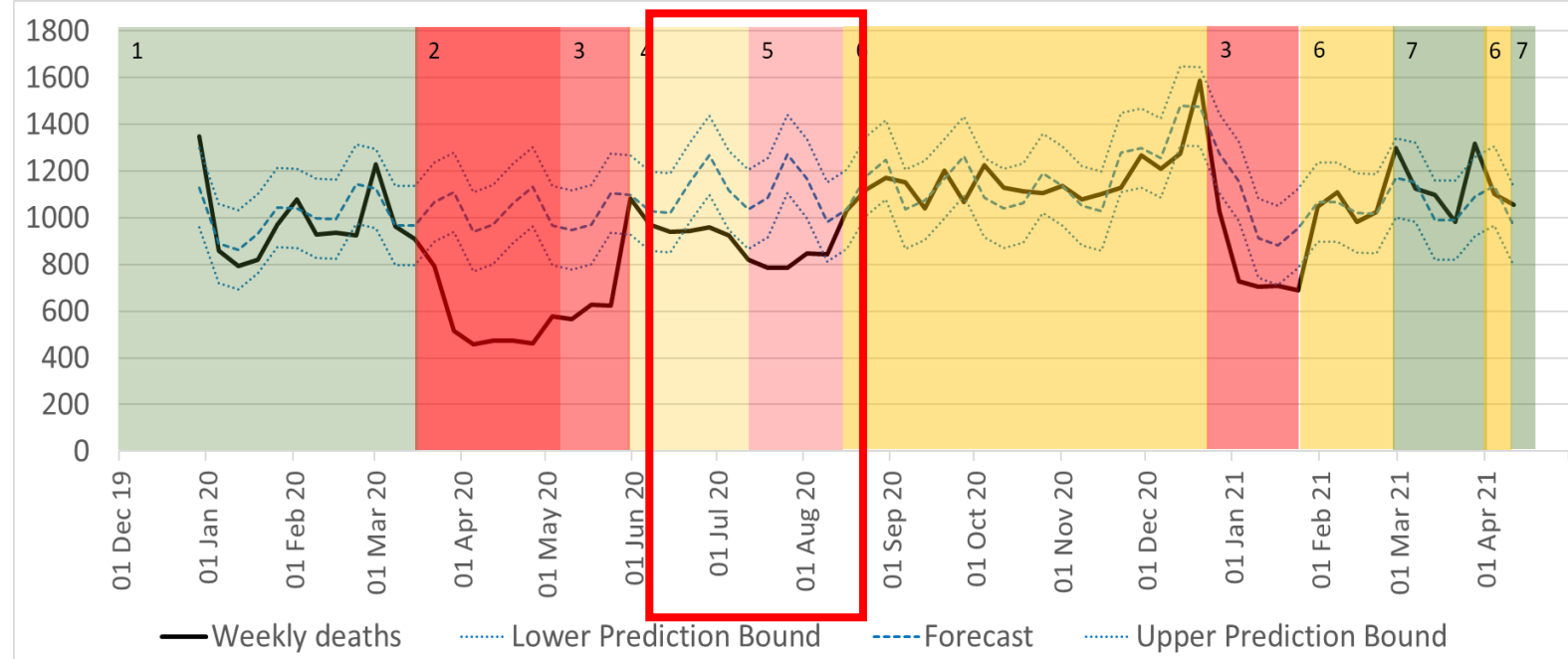


<https://issafrica.org/crimehub/facts-and-figures/crimehub/crime-trends-1994-to-2004/crimehub/national-crime-statistics-by-crime-type#murder>
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- National examples**
- 2012 Road Traffic Amendment Bill
 - 2013 Control of Marketing of Alcohol and Tobacco Products Bill
 - 2016 Liquor Products Amendment Bill
 - 2017 Liquor Amendment Bill (LAFIC)
- Provincial examples (discussed but not implemented)**
- 2009 Western Cape Liquor Act
 - 2017 Gauteng Liquor Act
 - 2017 Western Cape Alcohol Harms Reduction Bill

Liquor legislation still stalled

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Unnatural deaths, alcohol bans and curfews: Evidence from a quasi-natural experiment during COVID-19

A Moultrie,¹ BBusc, MSc, PhD; R E Dorrington,¹ BCom, BSc Hons, BA, MPhil, FASSA; R Laubscher,¹ BCom; P Groenewald,² MB ChB, MPH; C D H Parry,³ MSc, MA, PhD; R Matzopoulos,^{3,4} BBusc, MPhil, PhD; D Bradshaw,^{3,4} MSc, DPhil



ALCOHOL, VIOLENCE, AND INJURY-INDUCED MORTALITY: EVIDENCE FROM A MODERN-DAY PROHIBITION

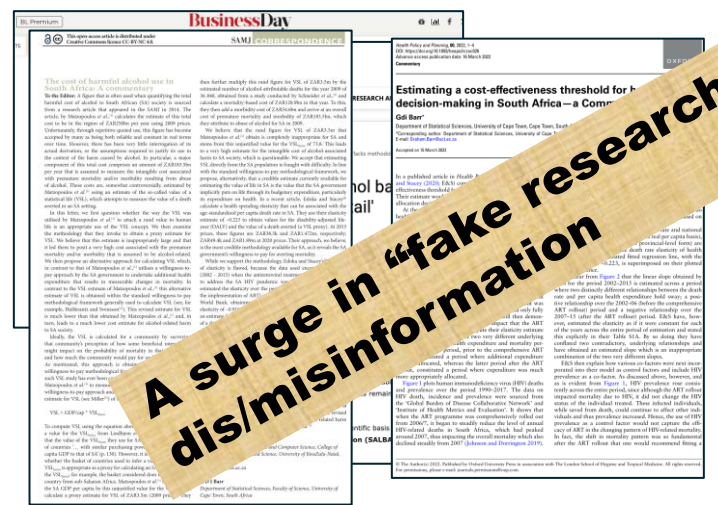
Kai Barron, Charles D. H. Parry, Debbie Bradshaw, Rob Dorrington, Pam Groenewald, Ria Laubscher, and Richard Matzopoulos*

IJHPM Letter to Editor
International Journal of Health Policy and Management

South Africa's COVID-19 Alcohol Sales Ban: The Potential for Better Policy-Making

Richard Matzopoulos^{1,2*}, Helen Walls¹, Sarah Cook¹, Leslie London¹

1. **Complete ban associated with significant reduction in injury deaths**
2. **“a perfect natural experiment”**
 - no announcement, no other changes
 - extensive analyses – confounders, sensitivity, other explanations
 - policy causally reduced injury-induced mortality **by at least 14%**
3. **“ a political ‘window of opportunity’ for evidence based policies to limit availability/reduce harm**



A surge in “fake research” dis/misinformation



Industry has dependence issues

Our experience with evidence

1. Expanded evidence-base for social and structural determinants in a resource-poor setting
 - despite the challenges – *evaluation is an afterthought*
2. Shown the repercussions of ignoring the evidence
 - Poorly implemented “quick wins” become “quick losses”
 - Compromises implementation of other evidence-based interventions
3. Evidence has been insufficient for sustained evidence-based prevention action
4. Evidence is only “nice to have” when:
 - it does not conflict with ideology
 - it does not disrupt funding streams
5. Policy changes do not always translate into implementation of prevention action



SAFETY 2026

16th World Conference on Injury
Prevention and Safety Promotion

2 - 4 SEPTEMBER 2026

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- What new methods and technologies can be applied to further the science?
- How can we better integrate what we already know about violence and its prevention in practice and in teaching curricula?



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& WESTERN CAPE**
convention bureau by WESGRO