



INVOLVEMENT OF LOCAL HEALTH DEPARTMENTS ENHANCES QUALITY:

LESSONS FROM LOCAL MORTALITY SURVEILLANCE IN THE WESTERN CAPE, SA

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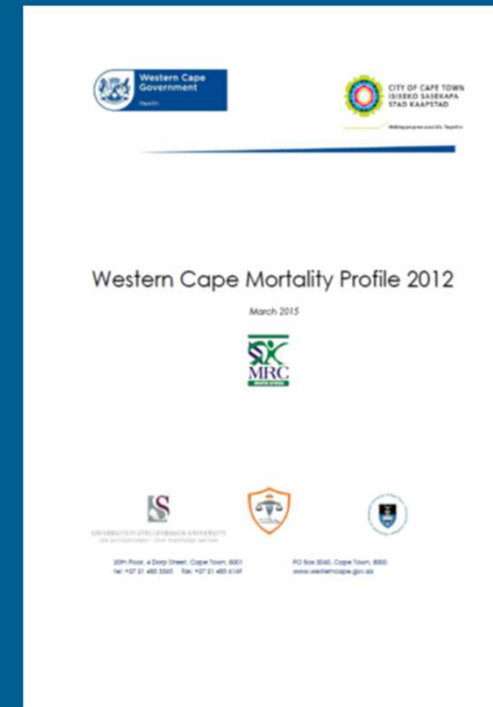
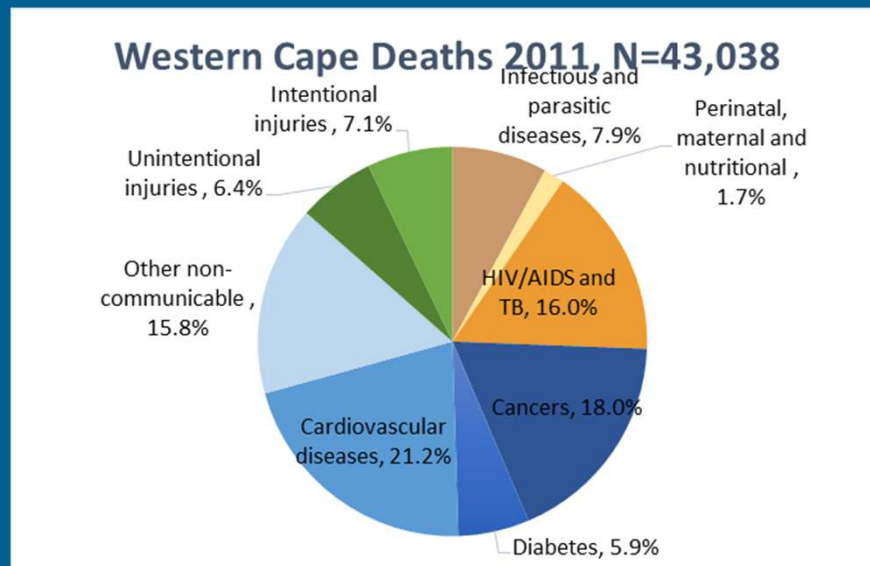


BACKGROUND

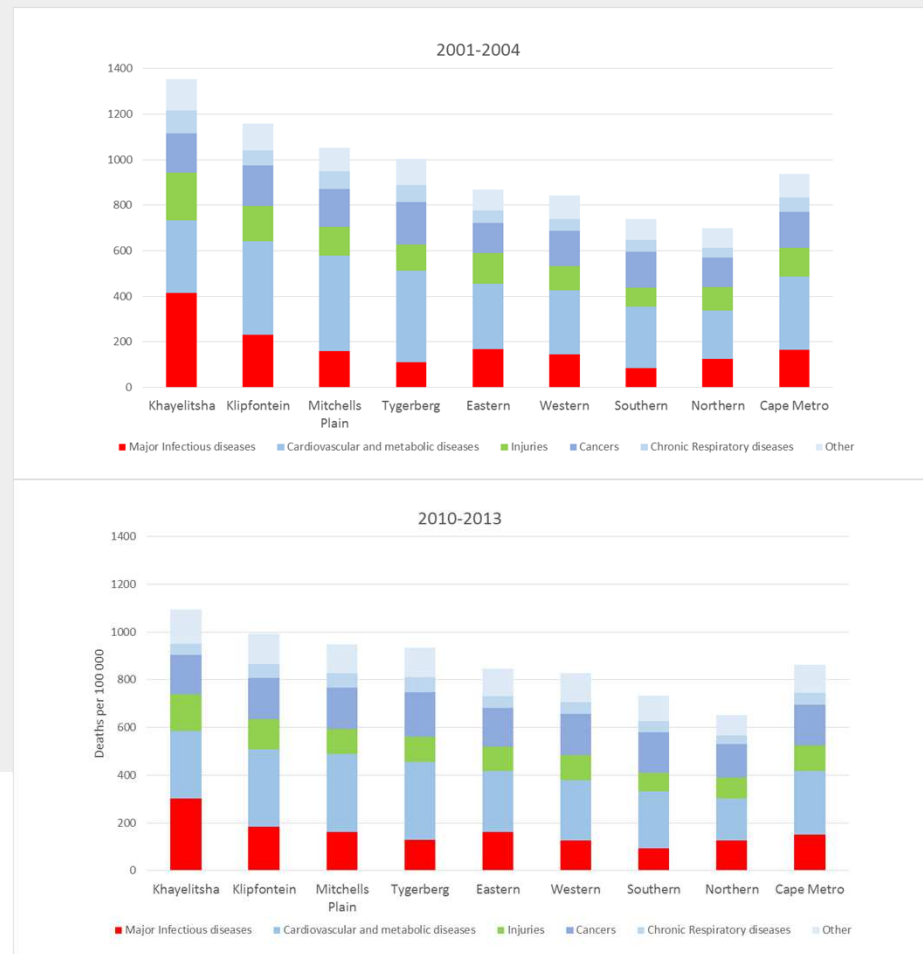
- **Local mortality surveillance system in Western Cape Province**
 - Aimed to enhance City of Cape Town system and extend to whole province
 - Aimed to report at sub-district level (smallest unit of health mx)
 - Collaboration City of Cape Town, WC DoH, SAMRC and UCT
- **Approach**
 - Health districts collected copies of death notifications from local DHA offices and captured data
 - CoCT developed web-based database and incorporated automated ICD-10 coding software (IRIS)
 - Incorporated information on injury deaths from Forensic Pathology Services
 - Need for province-wide training in medical certification of death was identified and implemented

LOCAL LEVEL MORTALITY SYSTEM

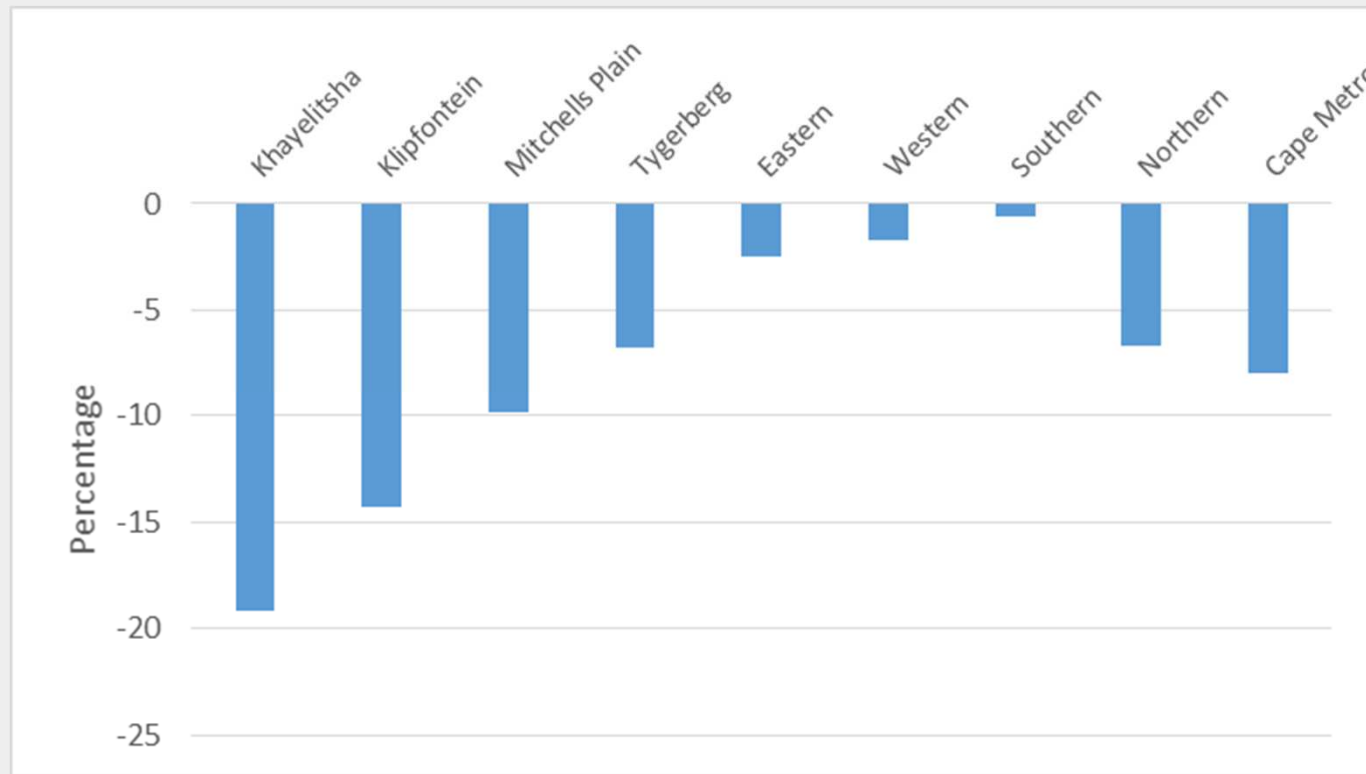
- By 2014 system was capturing deaths within 3 weeks and automatically coding 70% of deaths
- Annual reports for 2009-2013 have been produced



LESSON 1: SUB-DISTRICT STATS SHOWED HEALTH INEQUITIES

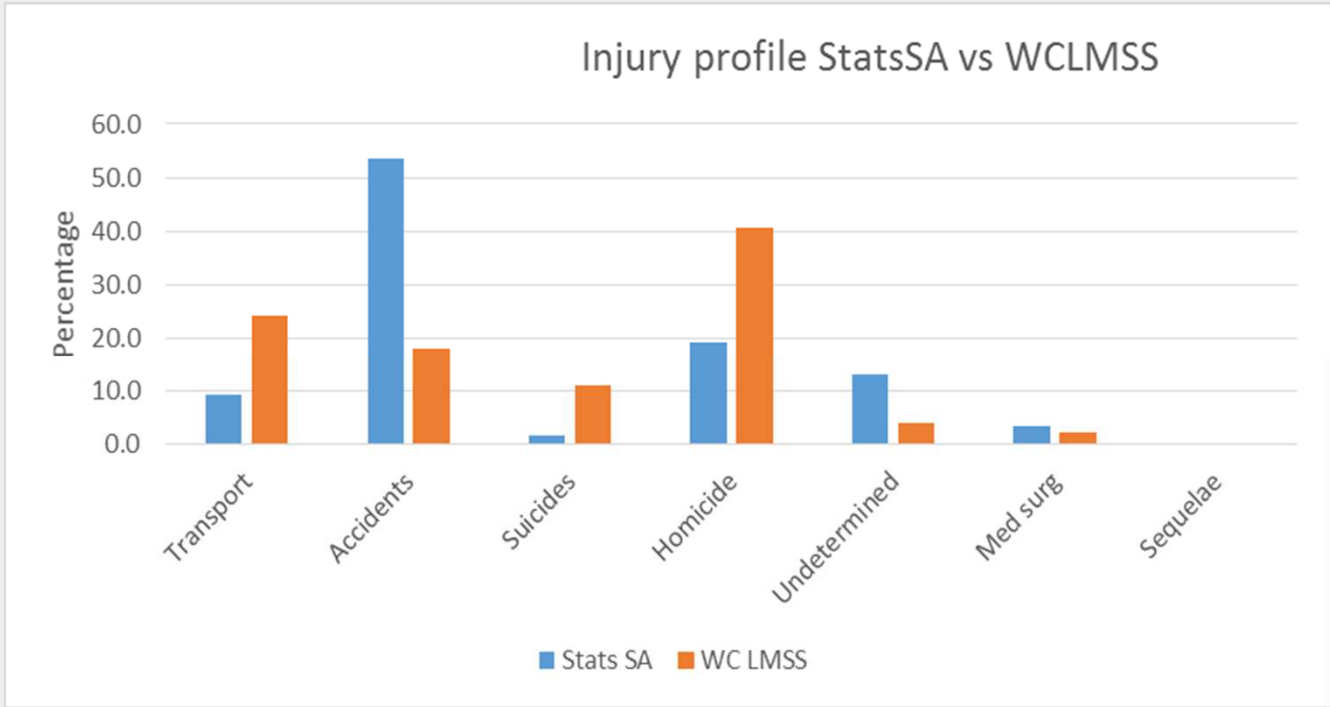


- AND HEALTH INEQUITIES CAN BE ADDRESSED



LESSON 2: LINKAGE IMPROVES QUALITY OF INJURY STATS

- Manner of death not stated on death certificate in SA for legal reasons
 - Inquest Act No 58 of 1959, Section 20(4) *Any person who prejudices, influences or anticipates the proceedings or findings at an inquest shall be guilty of an offence.....*
- Stats SA coding according to ICD-10 guidelines:
 - injuries with unspecified manner default to accidental



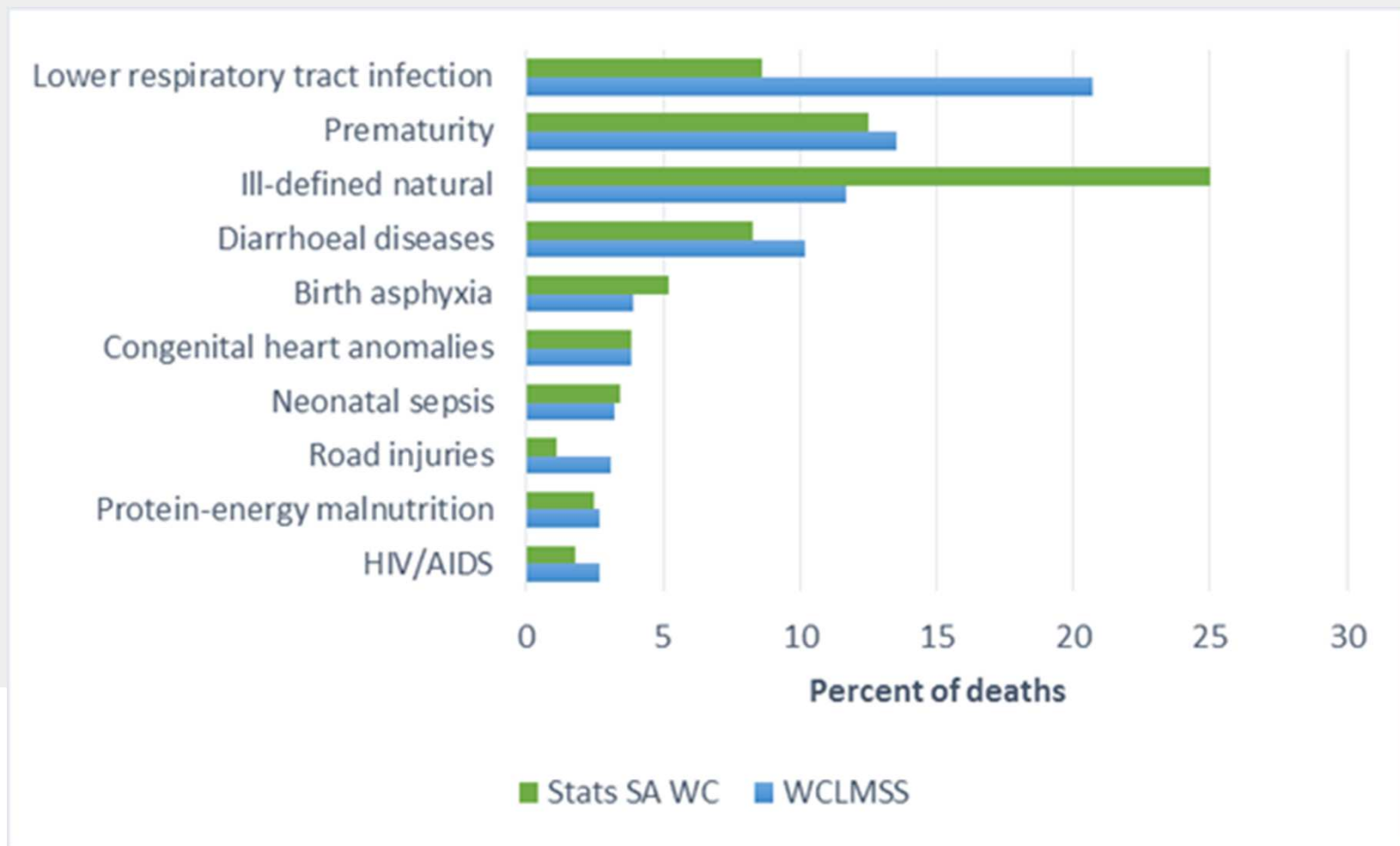
COMPARISON OF CAUSE OF WC INJURY DEATHS REPORTED BY STATS SA AND WC LMSS, 2011

Cause	Stats SA deaths	WC LMSS deaths
Accidents	3591	2585
<i>Transport injuries</i>	<i>494</i>	<i>1403</i>
<i>Unspecified factor</i>	1292	94
<i>Accidental gunshot</i>	<i>552</i>	<i>4</i>
<i>Accidental hanging</i>	<i>326</i>	<i>0</i>
<i>Other accidents specified</i>	927	1084
Suicide	87	630
Homicide	1036	2356
Undetermined intent	701	225
Total injuries	5415	5796

LESSON 3: LINKAGE IMPROVES QUALITY OF CHILD MORTALITY STATS

- In Western Cape 51% of children U5 die outside health facilities
- Investigated as “sudden unexplained death” in an infant at forensic mortuaries
- Cause of death often not reported on death certificate (legal and logistical reasons)
- High proportion of ill-defined natural causes of death in children under five, especially in age 1 – 11 months

COMPARISON OF LEADING CAUSES OF UNDER-5 CHILD DEATHS STATS SA AND LMSS DATA, WESTERN CAPE 2011



LESSON 4: HEALTH INVOLVEMENT FACILITATED TRAINING IN MEDICAL CERTIFICATION AND REDUCED PROPORTIONS OF ILL-DEFINED AND GARBAGE CODES



Source: Own analysis of data from Stats SA

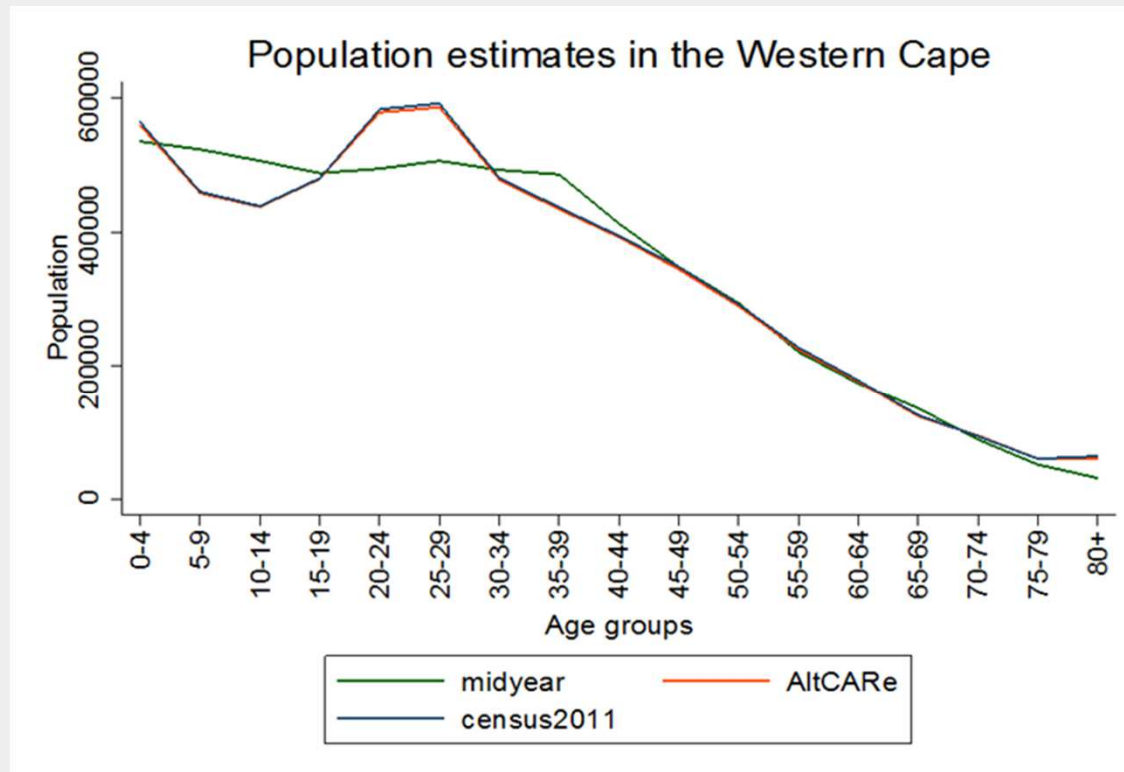
LESSON 5: HEALTH INVOLVEMENT FACILITATED PUBLIC HEALTH ACTIONS E.G. DIARRHOEA DEATHS

- Immediate environmental health assessment of living conditions and provision of health education if required
- Escalate problems with access to water and sanitation and refuse collection to respective departments
- Sub-district intersectoral fora established; meet monthly to discuss ways to mitigate health risks
- Diarrhoea hot spots identified: ensure that local health facilities appropriately trained and equipped; health promotion campaigns
- Surveillance extended to pneumonia deaths in children

LESSON 5: HEALTH INVOLVEMENT FACILITATED EVALUATION OF HEALTH PROGRAMMES & IMPROVING SERVICE EFFICIENCY

- Linking of HIV deaths with laboratory and clinical data identified
 - Missed opportunities at various stages of Mx
 - Need for wider testing, better referral strategies
 - Need for improved routine care and retention in care
- Linking cervical cancer deaths with laboratory data
 - Only 36% had been screened prior to Dx
- Linking TB Rx defaulters with death register BEFORE trying to trace patients saved wasted efforts

LESSON 6: GRAPPLING WITH THE DENOMINATOR: A CHALLENGE FOR SMALL AREA MORTALITY RATES



GRAPPLING WITH THE DENOMINATOR: A CHALLENGE FOR SMALL AREAS

District	STATS SA REPORTED LIVE BIRTHS 2014				HEALTH FACILITY BIRTHS SINJANI / PREHMIS		
	2011	2012	2013	2014	2011	2012	2013
Cape Winelands	13,470	14,066	13,403	12,921	14,637	14,614	14,561
Central Karoo	1,123	1,252	1,286	1,168	1,175	1,199	1,162
City of Cape Town	71,440	74,374	62,995	61,237	72,480	73,007	75,775
Eden	9,565	10,050	10,271	8,914	9,910	9,835	9,826
Overberg	2,854	3,173	3,433	3,634	3,241	3,263	3,207
West Coast	5,898	6,058	5,686	4,997	5,498	5,493	5,464
Western Cape	104,350	108,973	97,074	92,871	106,941	107,411	109,995

CONCLUSIONS

- Involvement of local health departments resulted in duplication of effort
- But created opportunities
 - to improve the quality of cause of death information
 - for enhanced use of data
- *Ideal to have an integrated approach involving local level health departments*



INQUEST ACT 20 (4)

- Any person who prejudices, influences or anticipates the proceedings or findings at an inquest shall be guilty of an offence and liable on conviction to a fine not exceeding R 2000 or imprisonment for a period not exceeding 6 months or to both such a fine and imprisonment.

BIRTH AND DEATH REGISTRATION ACT

- **15. Certificate by medical practitioner**

- (1) Where a medical practitioner is satisfied that the death of any person who was attended before his or her death by the medical practitioner was due to natural causes, he or she shall issue a prescribed certificate stating the cause of death.
- (2) A medical practitioner who did not attend any person before his or her death but after the death of the person examined the corpse and is satisfied that the death was due to natural causes, may issue a prescribed certificate to that effect.
- (3) If a medical practitioner is of the opinion that the death was due to other than natural causes, he or she shall not issue a certificate mentioned in subsection (1) or (2) and shall inform a police officer as to his or her opinion in that regard.

- **17. Death due to other than natural causes**

- (1) After an investigation as to the circumstances of a death due to other than natural causes in terms of section 3 of the Inquests Act, 1959 (Act No. 58 of 1959), the medical practitioner concerned shall, as soon as he or she is satisfied that the corpse concerned is no longer required for the purposes of an examination mentioned in the said section 3, issue a prescribed certificate to that effect and deliver it to the police officer concerned.
- (2) After the certificate referred to in subsection (1) has been issued, the police officer concerned, or any person contemplated in section 4, as the case may be, may, on the basis of the said certificate, complete the prescribed death register, without stating a cause of death, and the police officer concerned or the person contemplated in section 4, as the case may be, may issue the prescribed burial order authorizing burial.