

## Report for Western Cape

### 2 SOUTH AFRICA

#### Cape Town Metro

#### Lower levels included, Detailed Perinatal Death data

January 2014 to December 2016

#### Deliveries:

	Number	% of all deliveries	% of Low Birth Weight
500 – 999g	3,568	1.7%	10.9%
1,000 – 1,499g	4,137	2.0%	12.6%
1,500 – 1,999g	6,994	3.3%	21.3%
2,000 – 2,499g	18,183	8.7%	55.3%
2,500g+	176,876	84.3%	
Total	209,758		

#### Perinatal outcome (500g +):

	Number	% of all deliveries	% of live births
Born alive	205,889	98.2%	
Survive	204,582	97.5%	99.4%
Early neonatal death	1,165	0.6%	0.6%
Late neonatal death	142	0.1%	0.1%

#### Perinatal outcome (1000g +):

	Number	% of all deliveries	% of live births
Born alive	203,975	97.2%	
Survive	203,306	96.9%	99.7%
Early neonatal death	579	0.3%	0.3%
Late neonatal death	90	0.0%	0.0%

#### Stillborn (500g +):

	Number	% of all deliveries	% of stillbirths
Stillborn:	3,869	1.8%	
Alive on admission	733	0.3%	18.9%
Dead on admission	1,154	0.6%	29.8%
Admission status ?	272	0.1%	7.0%
Macerated	1,710	0.8%	44.2%

### Stillborn (1000g +):

	Number	% of all deliveries	% of stillbirths
Stillborn:	2,215	1.1%	
Alive on admission	253	0.1%	11.4%
Dead on admission	761	0.4%	34.4%
Admission status ?	115	0.1%	5.2%
Macerated	1,086	0.5%	49.0%

### Multiple pregnancies

	Number	Percentage
Multiple pregnancies reported	2,599	1.3%
Neonates delivered from multiple pregnancies	5,230	2.5%

### Antenatal care

	Number	Percentage
Attended ANC at local clinic	127,474	61.5%
Attended ANC elsewhere	5,252	2.5%
Received no antenatal care	7,826	3.8%
Antenatal care unknown	66,575	32.1%

### Born before arrival

	Number	Percentage
Neonates delivered BBA	7,560	3.6%

### Delivery data

	Number	Percentage
Normal vaginal delivery	138,617	66.1%
Ventouse	2,732	1.3%
Forceps	323	0.2%
Breech	1,120	0.5%
Caesarean section	55,235	26.3%
Other	21	0.0%
Unknown	11,710	5.6%

### Parity

	Number	Percentage
Primiparae	25,834	12.5%
Multiparae	45,785	22.1%
Grand multiparae	3,755	1.8%
Unknown	109,327	52.8%

### Syphilis serology

	Number	Percentage
Positive	3,116	1.5%
Negative	95,051	45.9%
Not done	1,081	0.5%
Unknown	107,879	52.1%

### Maternal age

	Number	Percentage
Younger than 18 years	9,601	4.6%
18-19 years	11,169	5.4%
Older than 34 years	18,531	8.9%

### HIV

	Number	Percentage
Positive	23,283	11.2%
Negative	73,515	35.5%
Not done	92	0.0%
Unknown	110,237	53.2%

### Perinatal care index

Indicator	All birth weights	All 1,000g +
<b>Perinatal care index</b>	1.72	1.24

### Rates 500g+

Perinatal mortality rate	24.0 / 1,000
Neonatal mortality rate	6.4 / 1,000
Early mortality rate	5.7 / 1,000
Late mortality rate	0.7 / 1,000
Stillbirth rate	18.5 / 1,000
Stillbirth/neonatal death ratio	3.0 : 1

### Rates 1000g+

Perinatal mortality rate	13.6 / 1,000
Neonatal mortality rate	3.3 / 1,000
Early mortality rate	2.8 / 1,000
Late mortality rate	0.4 / 1,000
Stillbirth rate	10.7 / 1,000
Stillbirth/neonatal death ratio	3.3 : 1

### Multiple pregnancies 1000g+

Perinatal mortality rate	63.7 / 1,000
Neonatal mortality rate	34.1 / 1,000
Early mortality rate	30.5 / 1,000
Late mortality rate	3.6 / 1,000
Stillbirth rate	34.2 / 1,000

## Perinatal Care Index

All birth weights	1000g +
1.53	0.96

## Causes of death

### Primary causes of death 500g+

Obstetric cause of death	Number	% of group	% of total
<b>INTRAUTERINE GROWTH RETARDATION</b>	<b>2,241</b>		<b>43.3</b>
IUGR with histological features of ischaemic placental disease	256	11.4	4.9
Idiopathic intrauterine growth retardation	215	25.1	4.2
Postmaturity	42	2.7	0.8
<b>INTRAPARTUM ASPHYXIA</b>	<b>1,652</b>		<b>31.9</b>
Labour related intrapartum asphyxia	307	13.7	5.9
Meconium aspiration	73	4.7	1.4
Cord prolapse	61	3.9	1.2
Cord around the neck	53	3.4	1.0
Ruptured uterus	31	2.0	0.6
Traumatic breech delivery	24	1.6	0.5
Shoulder dystocia	12	4.9	0.2
Traumatic assisted delivery	10	4.1	0.2
Precipitous labour	5	2.0	0.1
<b>MISCELLANEOUS</b>	<b>1,545</b>		<b>29.8</b>
Other cause of death not described in classification	138	8.9	2.7
Twin-to-twin transfusion	34	2.2	0.7
Rhesus isoimmunisation	8	3.3	0.2
<b>INTRAUTERINE DEATH</b>	<b>1,265</b>		<b>24.4</b>
Unexplained intrauterine death - macerated	675	40.9	13.0
Unexplained intrauterine death - fresh	292	13.0	5.6
Unexplained IUD due to lack of notes	145	9.4	2.8
<b>SPONTANEOUS PRETERM LABOUR</b>	<b>1,104</b>		<b>21.3</b>
Ideopathic preterm labour	912	40.7	17.6
Preterm premature rupture of membranes	117	7.6	2.3
Preterm premature rupture of membranes with chorioamnionitis	93	6.0	1.8
Preterm labour with chorioamnionitis with intact membranes	56	22.9	1.1
Iatrogenic preterm delivery for no real reason	37	15.1	0.7
Cervical incompetence	29	11.8	0.6
<b>NO OBSTETRIC CAUSE / NOT APPLICABLE</b>	<b>858</b>		<b>16.6</b>
No obstetric cause / Not applicable	194	34.5	3.7
<b>ANTEPARTUM HAEMORRHAGE</b>	<b>662</b>		<b>12.8</b>
Abruptio placentae with hypertension	814	64.3	15.7
Abruptio placentae	684	41.4	13.2
Antepartum haemorrhage of unknown origin	49	3.2	0.9
Placenta praevia	16	6.5	0.3

MATERNAL DISEASE	563		10.9
Maternal diabetes mellitus	159	18.5	3.1
Other maternal disease	30	1.9	0.6
Maternal heart disease	8	3.3	0.2
Maternal disease due to herbal medicine use	2	0.8	0.0
FETAL ABNORMALITY	294		5.7
Abnormality of multiple systems	201	23.4	3.9
Fetal chromosomal abnormality	189	22.0	3.6
Neural tube defects	104	6.7	2.0
Cardiovascular system abnormality	73	4.7	1.4
Renal system abnormality	68	4.4	1.3
Non-immune hydrops fetalis	57	3.7	1.1
Hydrocephalus	55	3.6	1.1
Non-specific fetal abnormality - FLK	22	9.0	0.4
HYPERTENSIVE DISORDERS	267		5.2
Proteinuric hypertension	884	80.1	17.1
Eclampsia	68	4.4	1.3
Pregnancy-induced hypertension without proteinuria	62	4.0	1.2
Chronic hypertension	33	2.1	0.6
TRAUMA	245		4.7
Motor vehicle accident	11	4.5	0.2
Assault	4	1.6	0.1
Domestic violence	4	1.6	0.1
Accidental abdominal trauma	4	1.6	0.1
INFECTIONS	239		4.6
Amniotic fluid infection	272	48.3	5.3
Syphilis	264	11.8	5.1
Other infections	70	4.5	1.4
Beta-haemolytic streptococcal infection	8	3.3	0.2

### Primary causes of death 1000g+

Obstetric cause of death	Number	% of group	% of total
ANTEPARTUM HAEMORRHAGE	662		22.9
Abruptio placentae with hypertension	362	54.7	12.5
Abruptio placentae	284	42.9	9.8
Antepartum haemorrhage of unknown origin	12	1.8	0.4
Placenta praevia	4	0.6	0.1
INTRAUTERINE DEATH	451		15.6
Unexplained intrauterine death - macerated	281	62.3	9.7
Unexplained intrauterine death - fresh	109	24.2	3.8
Unexplained IUD due to lack of notes	61	13.5	2.1
FETAL ABNORMALITY	294		10.2
Abnormality of multiple systems	73	24.8	2.5
Fetal chromosomal abnormality	71	24.1	2.5
Neural tube defects	36	12.2	1.2
Cardiovascular system abnormality	31	10.5	1.1
Renal system abnormality	28	9.5	1.0
Non-immune hydrops fetalis	26	8.8	0.9
Hydrocephalus	20	6.8	0.7

Non-specific fetal abnormality - FLK	9	3.1	0.3
<b>INTRAPARTUM ASPHYXIA</b>	<b>288</b>		<b>10.0</b>
Labour related intrapartum asphyxia	153	53.1	5.3
Meconium aspiration	36	12.5	1.2
Cord prolapse	28	9.7	1.0
Cord around the neck	26	9.0	0.9
Ruptured uterus	15	5.2	0.5
Traumatic breech delivery	12	4.2	0.4
Shoulder dystocia	6	2.1	0.2
Traumatic assisted delivery	5	1.7	0.2
Precipitous labour	2	0.7	0.1
<b>HYPERTENSIVE DISORDERS</b>	<b>266</b>		<b>9.2</b>
Proteinuric hypertension	208	78.2	7.2
Pregnancy-induced hypertension without proteinuria	25	9.4	0.9
Eclampsia	21	7.9	0.7
Chronic hypertension	12	4.5	0.4
<b>INFECTIONS</b>	<b>239</b>		<b>8.3</b>
Syphilis	113	47.3	3.9
Amniotic fluid infection	95	39.7	3.3
Other infections	27	11.3	0.9
Beta-haemolytic streptococcal infection	4	1.7	0.1
<b>SPONTANEOUS PRETERM LABOUR</b>	<b>218</b>		<b>7.6</b>
Ideopathic preterm labour	162	74.3	5.6
Preterm premature rupture of membranes with chorioamnionitis	18	8.3	0.6
Preterm premature rupture of membranes	18	8.3	0.6
Iatrogenic preterm delivery for no real reason	9	4.1	0.3
Preterm labour with chorioamnionitis with intact membranes	9	4.1	0.3
Cervical incompetence	1	0.5	0.0
<b>INTRAUTERINE GROWTH RETARDATION</b>	<b>204</b>		<b>7.1</b>
IUGR with histological features of ischaemic placental disease	97	47.5	3.4
Idiopathic intrauterine growth retardation	81	39.7	2.8
Postmaturity	21	10.3	0.7
<b>MATERNAL DISEASE</b>	<b>95</b>		<b>3.3</b>
Maternal diabetes mellitus	77	81.1	2.7
Other maternal disease	12	12.6	0.4
Maternal heart disease	3	3.2	0.1
Maternal disease due to herbal medicine use	1	1.1	0.0
<b>NO OBSTETRIC CAUSE / NOT APPLICABLE</b>	<b>94</b>		<b>3.3</b>
No obstetric cause / Not applicable	94	100.0	3.3
<b>MISCELLANEOUS</b>	<b>65</b>		<b>2.3</b>
Other cause of death not described in classification	53	81.5	1.8
Twin-to-twin transfusion	9	13.8	0.3
Rhesus isoimmunisation	3	4.6	0.1
<b>TRAUMA</b>	<b>9</b>		<b>0.3</b>
Motor vehicle accident	4	44.4	0.1
Assault	2	22.2	0.1

Accidental abdominal trauma	2	22.2	0.1
Domestic violence	1	11.1	0.0

### Final neonatal causes of death 500g+

Neonatal cause of death	Number	% of group	% of total
<b>INFECTION</b>	<b>721</b>		<b>55.1</b>
Septicaemia	55	7.7	4.2
Congenital syphilis	51	7.2	3.9
Nosocomial infection	47	6.6	3.6
Congenital infection	24	3.4	1.8
Group B streptococcal infection	9	1.3	0.7
Other infection	8	1.1	0.6
Pneumonia	8	1.1	0.6
Meningitis	3	33.3	0.2
<b>MISCELLANEOUS</b>	<b>712</b>		<b>54.4</b>
Other cause of death not described in classification	24	3.4	1.8
Non-immune hydrops	20	2.8	1.5
Apnoeic attacks in the first week	7	1.0	0.5
Hypovolaemic shock	4	0.6	0.3
Sudden Infant Death Syndrome (SIDS)	4	0.6	0.3
Aspiration pneumonia	2	22.2	0.2
Haemorrhagic disease of the new-born	2	22.2	0.2
<b>IMMATURITY RELATED</b>	<b>444</b>		<b>33.9</b>
Extreme multi-organ immaturity	558	77.4	42.7
Hyaline membrane disease	98	25.3	7.5
Necrotizing enterocolitis	97	25.0	7.4
Pulmonary haemorrhage	67	9.4	5.1
Intraventricular haemorrhage	38	5.3	2.9
Other immaturity related causes	20	2.8	1.5
<b>UNKNOWN CAUSE OF DEATH</b>	<b>388</b>		<b>29.7</b>
Unknown cause of death	81	11.2	6.2
<b>HYPOXIA</b>	<b>203</b>		<b>15.5</b>
Hypoxic ischaemic encephalopathy	290	65.3	22.2
Other complications of hypoxia	42	5.9	3.2
Meconium aspiration	35	4.9	2.7
Persistent fetal circulation	28	3.9	2.1
<b>CONGENITAL ABNORMALITIES</b>	<b>164</b>		<b>12.5</b>
Cardiovascular system abnormalities	78	20.1	6.0
Other congenital abnormalities (incl. multiple & skeletal)	75	19.3	5.7
Chromosomal abnormality	58	8.1	4.4
Central nervous system abnormalities	51	7.2	3.9
Renal system abnormalities	28	3.9	2.1
Respiratory abnormalities (incl. diaphragmatic hernia)	27	3.8	2.1
Biochemical abnormality	14	2.0	1.1
Alimentary tract abnormalities (excl. diaphragmatic hernia)	9	1.3	0.7
<b>TRAUMA</b>	<b>9</b>		<b>0.7</b>

Subaponeurotic haemorrhage	4	0.6	0.3
Unknown cause of death	0		0.0

### Final neonatal causes of death 1000g+

Neonatal cause of death	Number	% of group	% of total
<b>HYPOXIA</b>	199		29.7
Hypoxic ischaemic encephalopathy	144	72.4	21.5
Other complications of hypoxia	20	10.1	3.0
Meconium aspiration	17	8.5	2.5
Persistent fetal circulation	14	7.0	2.1
<b>CONGENITAL ABNORMALITIES</b>	164		24.5
Cardiovascular system abnormalities	38	23.2	5.7
Other congenital abnormalities (incl. multiple & skeletal)	35	21.3	5.2
Chromosomal abnormality	28	17.1	4.2
Central nervous system abnormalities	25	15.2	3.7
Renal system abnormalities	14	8.5	2.1
Respiratory abnormalities (incl. diaphragmatic hernia)	13	7.9	1.9
Biochemical abnormality	7	4.3	1.0
Alimentary tract abnormalities (excl. diaphragmatic hernia)	4	2.4	0.6
<b>IMMATURITY RELATED</b>	152		22.7
Extreme multi-organ immaturity	41	27.0	6.1
Necrotizing enterocolitis	37	24.3	5.5
Hyaline membrane disease	32	21.1	4.8
Pulmonary haemorrhage	20	13.2	3.0
Intraventricular haemorrhage	14	9.2	2.1
Other immaturity related causes	7	4.6	1.0
<b>INFECTION</b>	82		12.3
Congenital syphilis	25	30.5	3.7
Septicaemia	20	24.4	3.0
Nosocomial infection	13	15.9	1.9
Congenital infection	11	13.4	1.6
Other infection	4	4.9	0.6
Group B streptococcal infection	4	4.9	0.6
Pneumonia	4	4.9	0.6
Meningitis	1	1.2	0.1
<b>UNKNOWN CAUSE OF DEATH</b>	40		6.0
Unknown cause of death	40	100.0	6.0
<b>MISCELLANEOUS</b>	30		4.5
Other cause of death not described in classification	11	36.7	1.6
Non-immune hydrops	10	33.3	1.5
Apnoeic attacks in the first week	3	10.0	0.4
Hypovolaemic shock	2	6.7	0.3
Sudden Infant Death Syndrome (SIDS)	2	6.7	0.3
Aspiration pneumonia	1	3.3	0.1
Haemorrhagic disease of the new-born	1	3.3	0.1
<b>TRAUMA</b>	2		0.3

Subaponeurotic haemorrhage	2	100.0	0.3
Unknown cause of death	0		0.0

### Probable avoidable factors 500g+

Description	Number	% of group	% of deaths
<b>MEDICAL PERSONNEL ASSOCIATED</b>	<b>1,518</b>		<b>29.3</b>
Other medical personnel associated factors	71	6.3	1.4
Medical personnel overestimated fetal size	61	5.4	1.2
No response to poor uterine fundal growth	61	5.4	1.2
Fetal distress not detected intrapartum; fetus monitored	60	5.4	1.2
Delay in referring patient for secondary/tertiary treatment	56	5.0	1.1
Fetal distress not detected antepartum; fetus monitored	52	4.6	1.0
No response to maternal hypertension	48	4.3	0.9
No response to history of stillbirths, abruptio etc.	38	5.2	0.7
Medical personnel underestimated fetal size	34	4.7	0.7
Management of 2nd stage: prolonged with no intervention	22	3.0	0.4
Fetal distress not detected antepartum; fetus not monitored	22	3.0	0.4
Poor progress in labour, but partogram not used correctly	20	2.8	0.4
Multiple pregnancy not diagnosed antenatally	20	2.8	0.4
Neonatal resuscitation inadequate	19	2.6	0.4
Incorrect management of hypertensive disease	18	2.5	0.3
No response to positive syphilis serology test	18	2.5	0.3
Congenital abnormality not diagnosed; U/S examination not performed	17	2.3	0.3
Fetal distress not detected intrapartum; fetus not monitored	16	2.2	0.3
Physical examination of patient at clinic incomplete	16	2.2	0.3
No response to maternal glycosuria	16	2.2	0.3
Nosocomial infection	14	1.9	0.3
Neonatal care: management plan inadequate	12	1.7	0.2
Management of 2nd stage: inappropriate use of vacuum	12	1.7	0.2
Breech presentation not diagnosed until late in labour	12	1.7	0.2
No response to history of poor fetal movement	12	1.7	0.2
Delay in medical personnel calling for expert assistance	10	1.4	0.2
Neonatal care: inadequate monitoring	10	1.4	0.2
Poor progress in labour - partogram interpreted incorrectly	10	1.4	0.2
Congenital abnormality not diagnosed; U/S examination was performed	8	1.1	0.2
Poor progress in labour, but partogram not used	8	1.1	0.2

No response to apparent postterm pregnancy	6	0.8	0.1
Incorrect management of antepartum haemorrhage	5	0.7	0.1
Baby managed incorrectly at Hospital/Clinic	4	0.6	0.1
Delay in doctor responding to call	3	0.4	0.1
GP did not give card/letter about antenatal care	3	0.4	0.1
ADMINISTRATIVE PROBLEMS	1,120		21.6
Lack of transport - Institution to institution	47	4.2	0.9
Other administrative problems	42	3.8	0.8
Lack of transport - Home to institution	29	4.0	0.6
Insufficient doctors available to manage the patient	21	2.9	0.4
Insufficient nurses on duty to manage the patient adequately	16	2.2	0.3
Theatre delay: all theatres occupied	10	1.4	0.2
Inadequate resuscitation equipment	7	1.0	0.1
Lack of adequate neonatal transport	7	1.0	0.1
Personnel not sufficiently trained to manage the patient	6	0.8	0.1
Inadequate theatre facilities	6	0.8	0.1
Personnel too junior to manage the patient	5	0.7	0.1
Inadequate facilities/equipment in neonatal unit/nursery	4	0.6	0.1
No on-site syphilis testing available	3	0.4	0.1
Theatre delay: staff not available	2	0.3	0.0
No accessible neonatal ICU bed with ventilator	2	0.3	0.0
Result of syphilis screening not returned to hospital/clinic	2	0.3	0.0
No syphilis screening performed at hospital / clinic	2	0.3	0.0
PATIENT ASSOCIATED	775		15.0
Never initiated antenatal care	550	36.2	10.6
Inappropriate response to poor fetal movements	378	24.9	7.3
Delay in seeking medical attention during labour	216	14.2	4.2
Booked late in pregnancy	142	12.7	2.7
Failed to return on the prescribed date	82	7.3	1.6
Infrequent visits to antenatal clinic	71	6.3	1.4
Smoking	68	6.1	1.3
Attempted termination of pregnancy	66	5.9	1.3
Other patient associated factors	53	4.7	1.0
Declines admission/treatment for personal/social reasons	45	4.0	0.9
Alcohol abuse	39	5.4	0.8
Illegal drug use	38	5.2	0.7
Inappropriate response to antepartum haemorrhage	31	4.3	0.6
Delay in seeking help when baby ill	23	3.2	0.4
Inappropriate response to rupture of membranes	6	0.8	0.1
Assault	5	0.7	0.1

Abandoned baby	2	0.3	0.0
INSUFFICIENT NOTES TO COMMENT ON AVOIDABLE FACTORS	727		14.0
File missing	18	2.5	0.3
Insufficient notes	13	1.8	0.3
Antenatal card lost	9	1.2	0.2

### Probable avoidable factors 1000g+

Description	Number	% of group	% of deaths
PATIENT ASSOCIATED	774		26.8
Never initiated antenatal care	226	29.2	7.8
Inappropriate response to poor fetal movements	173	22.4	6.0
Delay in seeking medical attention during labour	99	12.8	3.4
Booked late in pregnancy	65	8.4	2.3
Failed to return on the prescribed date	39	5.0	1.4
Infrequent visits to antenatal clinic	33	4.3	1.1
Other patient associated factors	24	3.1	0.8
Smoking	24	3.1	0.8
Attempted termination of pregnancy	20	2.6	0.7
Declines admission/treatment for personal/social reasons	19	2.5	0.7
Inappropriate response to antepartum haemorrhage	14	1.8	0.5
Illegal drug use	12	1.6	0.4
Delay in seeking help when baby ill	11	1.4	0.4
Alcohol abuse	10	1.3	0.3
Assault	2	0.3	0.1
Inappropriate response to rupture of membranes	2	0.3	0.1
Abandoned baby	1	0.1	0.0
MEDICAL PERSONNEL ASSOCIATED	374		13.0
Other medical personnel associated factors	31	8.3	1.1
Fetal distress not detected intrapartum; fetus monitored	30	8.0	1.0
No response to poor uterine fundal growth	29	7.8	1.0
Medical personnel overestimated fetal size	28	7.5	1.0
Fetal distress not detected antepartum; fetus monitored	26	7.0	0.9
Delay in referring patient for secondary/tertiary treatment	25	6.7	0.9
No response to maternal hypertension	21	5.6	0.7
Medical personnel underestimated fetal size	16	4.3	0.6
No response to history of stillbirths, abruptio etc.	16	4.3	0.6
Management of 2nd stage: prolonged with no intervention	11	2.9	0.4
Poor progress in labour, but partogram not used correctly	10	2.7	0.3
Fetal distress not detected antepartum; fetus	10	2.7	0.3

not monitored			
Neonatal resuscitation inadequate	9	2.4	0.3
Congenital abnormality not diagnosed; U/S examination not performed	8	2.1	0.3
Incorrect management of hypertensive disease	8	2.1	0.3
Fetal distress not detected intrapartum; fetus not monitored	8	2.1	0.3
No response to positive syphilis serology test	8	2.1	0.3
No response to maternal glycosuria	8	2.1	0.3
Multiple pregnancy not diagnosed antenatally	7	1.9	0.2
Neonatal care: management plan inadequate	6	1.6	0.2
Management of 2nd stage: inappropriate use of vacuum	6	1.6	0.2
Breech presentation not diagnosed until late in labour	6	1.6	0.2
Physical examination of patient at clinic incomplete	6	1.6	0.2
Delay in medical personnel calling for expert assistance	5	1.3	0.2
Neonatal care: inadequate monitoring	5	1.3	0.2
Poor progress in labour - partogram interpreted incorrectly	5	1.3	0.2
No response to history of poor fetal movement	5	1.3	0.2
Congenital abnormality not diagnosed; U/S examination was performed	4	1.1	0.1
Nosocomial infection	4	1.1	0.1
Poor progress in labour, but partogram not used	4	1.1	0.1
No response to apparent postterm pregnancy	3	0.8	0.1
Baby managed incorrectly at Hospital/Clinic	2	0.5	0.1
Incorrect management of antepartum haemorrhage	2	0.5	0.1
Delay in doctor responding to call	1	0.3	0.0
GP did not give card/letter about antenatal care	1	0.3	0.0
ADMINISTRATIVE PROBLEMS	95		3.3
Lack of transport - Institution to institution	21	22.1	0.7
Other administrative problems	19	20.0	0.7
Lack of transport - Home to institution	14	14.7	0.5
Insufficient doctors available to manage the patient	10	10.5	0.3
Insufficient nurses on duty to manage the patient adequately	7	7.4	0.2
Theatre delay: all theatres occupied	5	5.3	0.2
Inadequate resuscitation equipment	3	3.2	0.1
Inadequate theatre facilities	3	3.2	0.1
Lack of adequate neonatal transport	3	3.2	0.1
Personnel too junior to manage the patient	2	2.1	0.1
Personnel not sufficiently trained to manage the patient	2	2.1	0.1
Theatre delay: staff not available	1	1.1	0.0
No accessible neonatal ICU bed with ventilator	1	1.1	0.0
Inadequate facilities/equipment in neonatal unit/nursery	1	1.1	0.0

No on-site syphilis testing available	1	1.1	0.0
Result of syphilis screening not returned to hospital/clinic	1	1.1	0.0
No syphilis screening performed at hospital / clinic	1	1.1	0.0
INSUFFICIENT NOTES TO COMMENT ON AVOIDABLE FACTORS	16		0.6
File missing	7	43.8	0.2
Insufficient notes	6	37.5	0.2
Antenatal card lost	3	18.8	0.1