

Victoria's mothers, babies and children 2014 and 2015

Appendix 6: Perinatal deaths in Victoria 2014 and 2015

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Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.

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Where the term 'Aboriginal' is used it refers to both Aboriginal and Torres Strait Islander people. Indigenous is retained when it is part of the title of a report, program or quotation.

ISBN 978-0-7311-7185-9

Available at <https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/consultative-councils/council-obstetric-paediatric-mortality/>

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Table 1: Perinatal mortality rates in Victoria 2014

Specified birthweight/ gestation	Total births	Live births	Stillbirths		Neonatal deaths		Perinatal deaths	
			Number	Rate	Number	Rate	Number	Rate
PMR _{Crude} ≥ 20 weeks or ≥ 400 g	79,110	78,438	672	8.5	231	2.9	903	11.4
PMR _{Adjusted} ≥ 20 weeks or ≥ 400 g excluding TOP for MPI ^a	78,963	78,437	526	6.7	230	2.9	756	9.6
PMR ₅₀₀ ≥ 500 g or ≥ 22 weeks	78,729	78,338	391	5.0	142	1.8	533	6.8
PMR _{1,000} ≥ 1,000 g or ≥ 28 weeks ^b	78,220	78,007	213	2.7	51	0.7	264	3.4

Table 2: Perinatal mortality rates in Victoria 2015

Specified birthweight/ gestation	Total births	Live births	Stillbirths		Neonatal deaths		Perinatal deaths	
			Number	Rate	Number	Rate	Number	Rate
PMR _{Crude} ≥ 20 weeks or ≥ 400 g	79,270	78,637	633	8.0	189	2.4	822	10.4
PMR _{Adjusted} ≥ 20 weeks or ≥ 400 g excluding TOP for MPI ^a	79,163	78,637	526	6.6	189	2.4	715	9.0
PMR ₅₀₀ ≥ 500 g or ≥ 22 weeks	78,867	78,515	352	4.5	129	1.6	481	6.1
PMR _{1,000} ≥ 1,000 g or ≥ 28 weeks ^b	78,430	78,255	175	2.2	52	0.7	227	2.9

Notes:

Stillbirth and perinatal death rates were calculated using total births (live births and stillbirths) as the denominator. Neonatal death rates were calculated using live births as the denominator. MPI – Maternal psychosocial indications TOP – Termination of pregnancy
a. Births, deaths and rates are adjusted for TOP for MPI.

b. This category is for international comparison, and only includes early neonatal deaths (0–6 days) not all neonatal deaths (0–27 days).

Table 3: Perinatal deaths and crude and adjusted mortality rates in Victoria 2001–2015

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number															
Live births	61,705	62,688	63,028	63,082	66,041	69,229	71,780	71,843	72,474	73,755	73,389	77,712	77,609	78,438	78,637
Stillbirths	444	445	521	610	599	607	672	682	767	738	705	659	712	672	633
Neonatal deaths	204	227	237	207	247	227	241	215	226	235	223	210	241	231	189
Perinatal deaths	648	672	758	817	846	834	913	897	993	973	928	869	953	903	822
PMR_{Crude}^{a,b}															
Stillbirth	7.1	7.0	8.2	9.6	9.0	8.7	9.3	9.4	10.5	9.9	9.5	8.4	9.1	8.5	8.0
Neonatal	3.3	3.6	3.8	3.3	3.7	3.3	3.4	3.0	3.1	3.2	3.0	2.7	3.1	2.9	2.4
Perinatal	10.4	10.6	11.9	12.8	12.7	11.9	12.6	12.4	13.6	13.1	12.5	11.1	12.2	11.4	10.4
Number (adjusted)															
Live births	61,705	62,688	63,028	63,082	66,039	69,229	71,780	71,843	72,474	73,755	73,389	77,712	77,609	78,437	78,637
Stillbirths	399	385	418	413	421	457	508	504	553	547	522	527	533	526	526
Neonatal deaths	204	227	237	207	245	227	241	215	226	235	223	210	241	230	189
Perinatal deaths	603	612	655	620	666	684	749	719	779	782	745	737	774	756	715
PMR_{Adjusted}^{a,b}															
Stillbirth	6.4	6.1	6.6	6.5	6.3	6.6	7.0	7.0	7.6	7.4	7.1	6.7	6.8	6.7	6.6
Neonatal	3.3	3.6	3.8	3.3	3.7	3.3	3.4	3.0	3.1	3.2	3.0	2.7	3.1	2.9	2.4
Perinatal	9.7	9.7	10.3	9.8	10.0	9.8	10.4	9.9	10.7	10.5	10.1	9.4	9.9	9.6	9.0

Note: this table contains amended figures since previous reports.

a. Stillbirth and perinatal death rates were calculated using total births (live births and stillbirths) as the denominator.

b. Neonatal death rates were calculated using live births as the denominator.

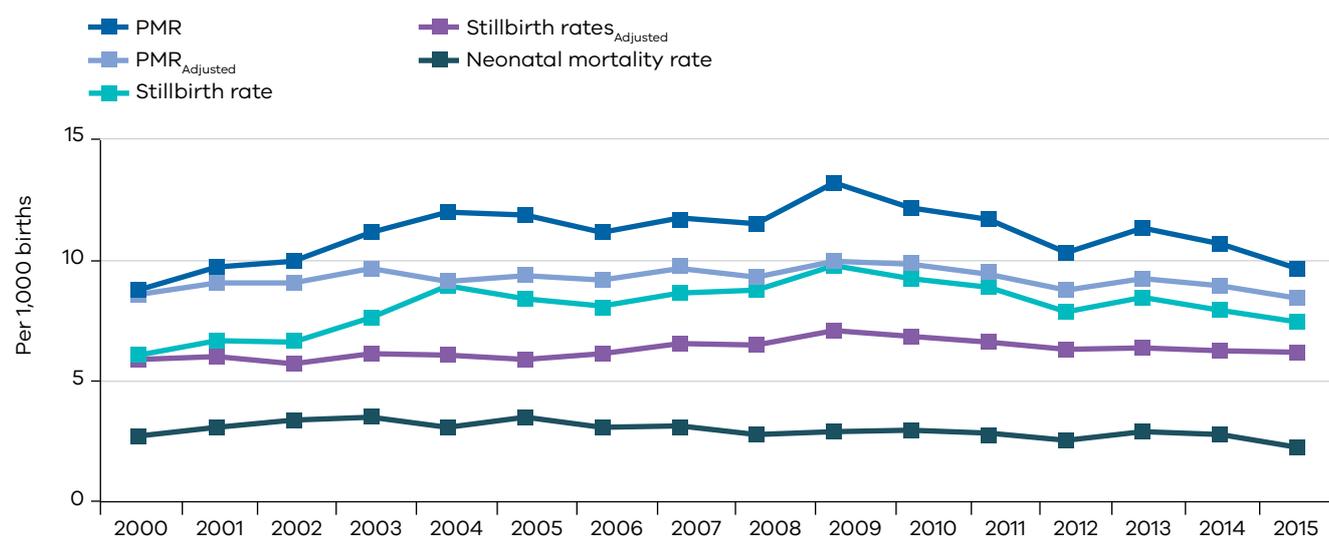
Figure 1: Perinatal mortality rates in Victoria 2000–2015 (crude and adjusted)

Table 4: Different definitions of perinatal mortality

Perinatal death definitions							PMR, Victoria		
	Criteria 1	Condition	Criteria 2	Inclusions	Impact on PMR compared with CCOPMM results	PMR 2014	PMR _{Adjusted} 2014	PMR 2015	PMR _{Adjusted} 2015
CCOPMM (Victoria)	≥ 20 weeks' gestation ^a	or, where gestation is unknown	birthweight of ≥ 400 g	Includes deaths of babies born in Victoria, even if mother not usually resident in Victoria	Results in more deaths included in the PMR than ABS	11.4	9.6	10.4	9.0
ABS	Birthweight of ≥ 400 g	or, where birthweight is unknown	≥ 20 weeks' gestation	Includes deaths of babies born only to mothers usually resident in the jurisdiction (Victoria)	Results in fewer deaths included in the PMR and therefore lower PMR than CCOPMM	10.3	9.5	9.7	8.8
NPDC 1 ^b	Birthweight of ≥ 400 g	or	≥ 20 weeks' gestation	Includes deaths of babies occurring in Victoria even if mother not usually resident in the jurisdiction, or infant not born in Victoria	Results in more deaths included in the PMR than CCOPMM	12.0	11.5	10.9	10.3
NPDC 2 ^b	Birthweight of ≥ 400 g	or	≥ 20 weeks' gestation	Adjusted to include only mothers usually resident in the jurisdiction (Victoria)	Results in fewer deaths included in the PMR and therefore lower PMR than NPDC1	11.7	11.4	10.8	10.2

a. Where a perinatal death is diagnosed unexpectedly ≥ 20 weeks' gestation (with no prior ultrasound or clinical evidence of definite heartbeat at or beyond 20 w), a minimum birthweight of 150 gm applies.

b. Calculated according to National Perinatal Data Collection (NPDC) definitions using data from the VPDC.

Table 5: PMR_{Crude} by maternal state or territory of usual residence, ABS 2008–2014

Usual residence of mother	2008	2009	2010	2011	2012	2013	2014
New South Wales	7.8	7.9	7.6	8.0	7.5	8.1	8.2
Victoria	7.9	8.9	8.0	8.1	7.7	8.2	10.7
Queensland	9.9	10.4	10.5	9.1	10.0	9.1	10.0
South Australia	6.5	6.2	6.1	6.0	5.9	6.1	8.8
Western Australia	8.1	8.8	8.0	9.7	8.4	7.5	8.8
Tasmania	9.1	10.6	10.9	10.1	10.1	9.5	13.7
Northern Territory	7.8	14.8	12.5	12.8	9.4	14.4	13.8
Australian Capital Territory	6.4	7.0	16.7	7.2	10.0	7.0	11.3
Australia	8.2	8.8	8.6	8.4	8.2	8.2	9.5

References: ABS Cat No 3303.0 Causes of death, Australia, 2013, released 31 March 2015 (<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailedPage/3303.02013?OpenDocument>), accessed October 27, 2015

Data prior to 2014

1: Table 13.1 Fetal, neonatal and perinatal deaths, Australia, 2004–2013.

2: Table 13.4 Perinatal deaths by state or territory of usual residence of mother, 2004–2013

2014 data

AIHW 2016. Australia's mothers and babies 2014—in brief. Perinatal statistics series no. 32. Cat. no. PER 87. Canberra: AIHW. Table 4.2 from Additional material, accessed December 9 2016 from <http://www.aihw.gov.au/publication-detail/?id=60129557656&tab=2>

Note:

The published PMR in this table differ from that previously published for CCOPMM Annual Reports, due to the ongoing revisions at ABS and CCOPMM.

Table 6: PMR_{Crude} by state or territory of death, AIHW 2008–2014

State or territory reporting the death	2008	2009	2010	2011	2012	2013	2014
New South Wales	8.7	8.6	8.2	8.5	8.1	8.0	7.7
Victoria	12.7	13.8	13.3	12.9	11.5	12.5	11.7
Queensland	9.6	11.0	10.4	9.7	10.1	9.5	9.7
South Australia	9.2	10.0	9.1	10.3	8.9	9.0	8.9
Western Australia	10.1	9.3	8.1	9.5	8.4	7.8	8.5
Tasmania	10.8	10.7	10.1	8.2	10.8	9.8	12.2
Northern Territory	14.0	14.0	15.3	11.2	9.2	18.2	12.8
Australian Capital Territory	11.2	15.1	12.9	13.0	11.2	9.1	12.6
Australia	10.2	9.8	9.3	9.9	9.6	9.7	9.6

References:

Hilder L, Zhichao Z, Parker M, Jahan S, Chambers GM 2014. Australia's mothers and babies 2012. Perinatal statistics series no. 30. Cat. no. PER 69. Canberra: AIHW.

AIHW 2015. Australia's mothers and babies 2013— supplementary tables. Perinatal statistics series no. 31. Cat. no. PER 72. Canberra: AIHW.

2014 data AIHW 2016. Australia's mothers and babies 2014—in brief. Perinatal statistics series no. 32. Cat. no. PER 87. Canberra: AIHW. Table 4.1 from Additional material, accessed December 9 2016 from <http://www.aihw.gov.au/publication-detail/?id=60129557656&tab=2>

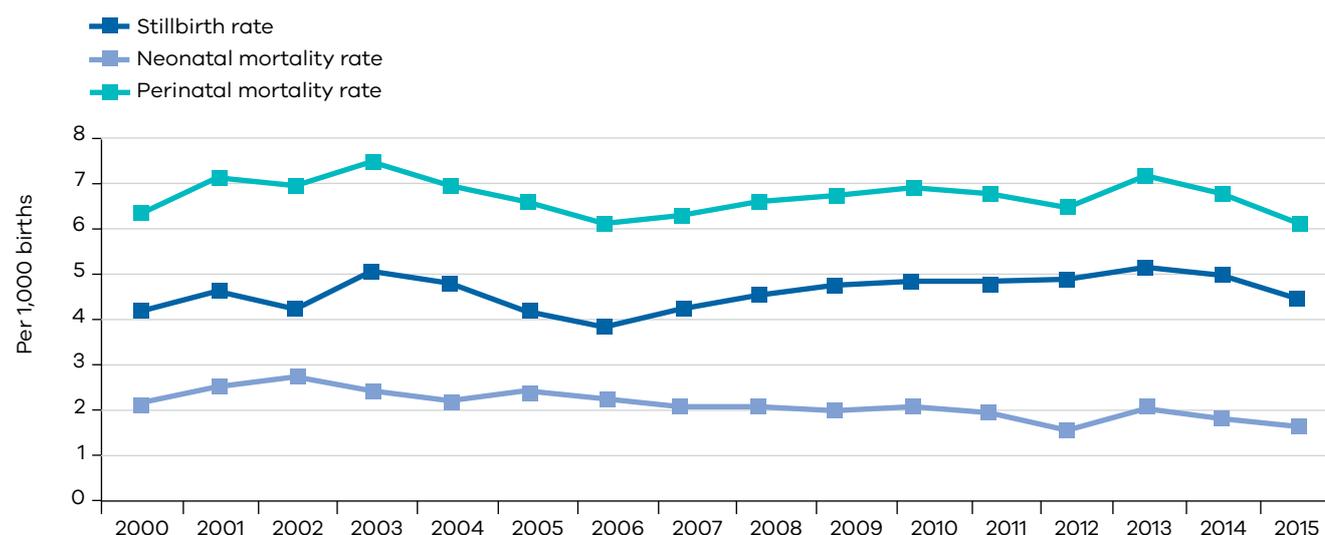
Table 7: PMR₅₀₀ in Victoria 2005–2015 (birthweight ≥ 500 g)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number											
Total births (birthweight ≥ 500 g)	66,226	69,421	71,981	72,100	72,706	74,000	73,628	78,000	77,906	78,729	78,867
Live births	65,948	69,155	71,677	71,774	72,360	73,641	73,273	77,618	77,505	78,338	78,515
Stillbirths	278	266	304	326	346	359	355	382	401	391	352
Neonatal deaths	159	157	148	149	143	152	143	121	156	142	129
Perinatal deaths	437	423	452	475	489	511	498	503	557	533	481
Rate per 1,000 births^{a,b}											
Stillbirths	4.2	3.8	4.2	4.5	4.8	4.9	4.8	4.9	5.1	5.0	4.5
Neonatal	2.4	2.3	2.1	2.1	2.0	2.1	2.0	1.6	2.0	1.8	1.6
Perinatal	6.6	6.1	6.3	6.6	6.7	6.9	6.8	6.4	7.1	6.8	6.1

a. Stillbirth and perinatal death rates were calculated using total births (live births and stillbirths) as the denominator.

b. Neonatal deaths rates were calculated using live births as the denominator.

Note: This table includes updated figures since previous reports.

Figure 2: PMR₅₀₀ in Victoria 2000–2015**Table 8: PMR₅₀₀ in Victoria 2000–2015**

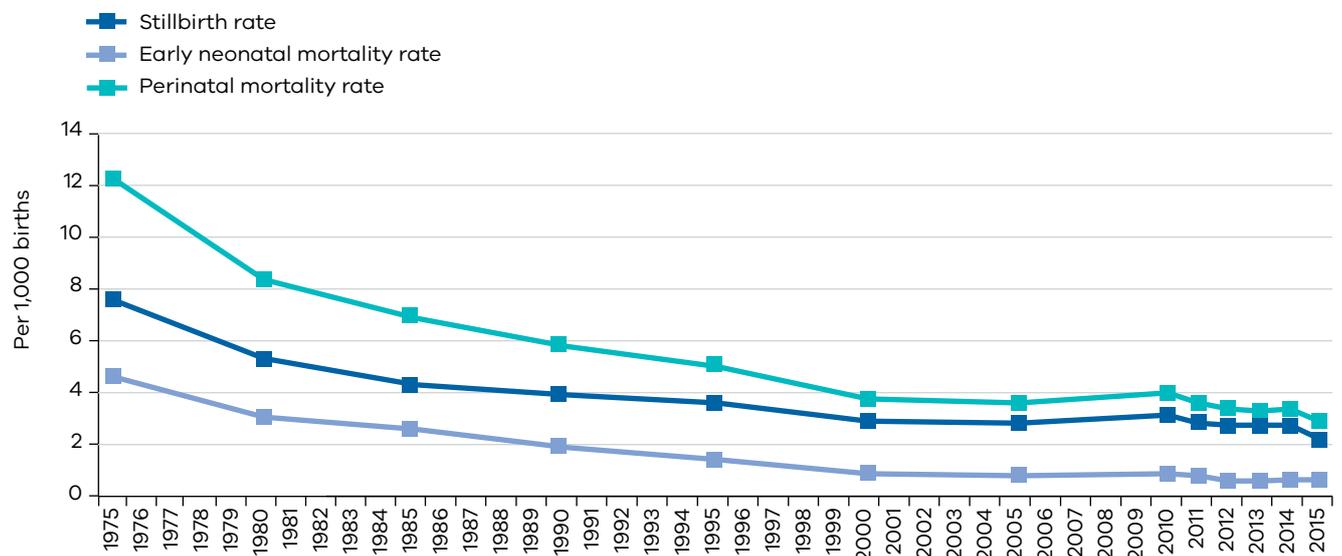
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Stillbirth rate	4.2	4.6	4.2	5.0	4.8	4.2	3.8	4.2	4.5	4.8	4.9	4.8	4.9	5.1	5.0	4.5
Neonatal mortality rate	2.2	2.5	2.7	2.4	2.2	2.4	2.3	2.1	2.1	2.0	2.1	2.0	1.6	2.0	1.8	1.6
Perinatal mortality rate	6.4	7.1	6.9	7.5	7.0	6.6	6.1	6.3	6.6	6.7	6.9	6.8	6.4	7.1	6.8	6.1

Table 9: PMR_{1,000} for international comparison, Victoria 2000–2015

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Stillbirth rate ^a	2.9	3.1	2.4	3	2.6	2.8	2.5	2.6	3	2.8	3.2	2.8	2.8	2.7	2.7	2.2
Early neonatal mortality rate ^b	0.9	1	0.8	0.9	0.8	0.8	0.8	0.8	0.7	1.1	0.9	0.8	0.6	0.6	0.7	0.7
Perinatal mortality rate ^a	3.8	4.1	3.2	3.9	3.3	3.6	3.3	3.4	4	3.9	4.0	3.6	3.4	3.3	3.4	2.9

a. Stillbirth and perinatal death rates were calculated using all births (live births and stillbirths) as the denominator.

b. Neonatal death rates were calculated using live births as the denominator. This category is for international comparison, and only includes early neonatal deaths (0–6 days) not all neonatal deaths (0–27 days). It includes all perinatal deaths, including terminations of pregnancy.

Figure 3: Trends in PMR_{1,000} for international comparison, Victoria 1975 to 2015**Table 10: Trends in PMR_{1,000} for international comparison, Victoria, 1975 to 2015**

	1975	1980	1985	1990	1995	2000	2005	2010	2011	2012	2013	2014	2015
Stillbirth rate	7.6	5.3	4.3	3.9	3.6	2.9	2.8	3.2	2.8	2.8	2.7	2.7	2.2
Early neonatal mortality rate	4.6	3.1	2.6	1.9	1.4	0.9	0.8	0.9	0.8	0.6	0.6	0.7	0.7
Perinatal mortality rate	12.3	8.4	6.9	5.8	5.0	3.8	3.6	4.0	3.6	3.4	3.3	3.4	2.9

Table 11a: Gestational age and PMR_{Adjusted}, Victoria 2014

Gestational age	Total births ^a		Stillbirths				Live births ^b		Neonatal deaths			Perinatal deaths			Live births surviving beyond neonatal period at each gestation	
	n	%	n	%	rate ^c	risk ^d	n	%	n	%	rate ^e	n	%	rate ^f	n	%
20–21 weeks	177	0.2	119	22.6	672.3	1.5	58	0.1	58	25.2	1,000.0	177	23.4	1,000.0	0	0.0
22–23 weeks	162	0.2	95	18.1	586.4	1.2	67	0.1	59	25.7	880.6	154	20.4	950.6	8	11.9
24–25 weeks	163	0.2	53	10.1	325.2	0.7	110	0.1	24	10.4	218.2	77	10.2	472.4	86	78.2
26–27 weeks	163	0.2	32	6.1	196.3	0.4	131	0.2	9	3.9	68.7	41	5.4	251.5	122	93.1
28–31 weeks	662	0.8	60	11.4	90.6	0.8	602	0.8	20	8.7	33.2	80	10.6	120.8	582	96.7
32–36 weeks	5,407	6.8	83	15.8	15.4	1.1	5,324	6.8	16	7.0	3.0	99	13.1	18.3	5,308	99.7
37–41 weeks	71,509	90.6	83	15.8	1.2	1.1	71,426	91.1	44	19.1	0.6	127	16.8	1.8	71,382	99.9
> 41 weeks	576	0.7	1	0.2	1.7	1.4	575	0.7	0	0.0	0.0	1	0.1	1.7	575	100.0
Not known	144	0.2	0	0.0	0.0	0.0	144	0.2	0	0.0	0.0	0	0.0	0.0	144	100.0
Total	78,963	100.0	526	100.0	6.7	N/A	78,437	100.0	230	100.0	2.9	756	100.0	9.6	78,207	99.7

a. Total births includes live births and stillbirths, (live birth data obtained from VPDC).

b. Live births includes those babies who later died during the neonatal period (babies born alive who died within 28 days of birth).

c. Stillbirth rate is calculated using total births as the denominator and is expressed as deaths per 1,000 total births at that gestation.

d. Stillbirth risk is calculated using total births (still in utero at that gestation) as the denominator, and is expressed as deaths per 1,000 total births at or beyond that gestation.

e. Neonatal death rate is calculated using live births as the denominator, and is expressed as deaths per 1,000 live births at that gestation.

f. Perinatal death rate is calculated using total births as the denominator, and is expressed as deaths per 1,000 total births at that gestation.

N/A – not applicable

Table 11b: Gestational age and PMR_{Adjusted}, Victoria 2015

Gestational age	Total births ^a		Stillbirths				Live births ^b		Neonatal deaths			Perinatal deaths			Live births surviving beyond neonatal period at each gestation	
	n	%	n	%	rate ^c	risk ^d	n	%	n	%	rate ^e	n	%	rate ^f	n	%
20–21 weeks	171	0.2	129	24.5	754.4	1.6	42	0.1	42	22.2	1,000.0	171	23.9	1,000.0	0	0.0
22–23 weeks	174	0.2	120	22.8	689.7	1.5	54	0.1	48	25.4	888.9	168	23.5	965.5	6	11.1
24–25 weeks	122	0.2	40	7.6	327.9	0.5	82	0.1	16	8.5	195.1	56	7.8	459.0	66	80.5
26–27 weeks	172	0.2	43	8.2	250.0	0.5	129	0.2	7	3.7	54.3	50	7.0	290.7	122	94.6
28–31 weeks	610	0.8	51	9.7	83.6	0.6	559	0.7	13	6.9	23.3	64	9.0	104.9	546	97.7
32–36 weeks	5,557	7.0	65	12.4	11.7	0.8	5,492	7.0	25	13.2	4.6	90	12.6	16.2	5,467	99.5
37–41 weeks	71,976	90.9	78	14.8	1.1	1.1	71,898	91.4	38	20.1	0.5	116	16.2	1.6	71,860	99.9
>41 weeks	373	0.5	0	0.0	0.0	0.0	373	0.5	0	0.0	0.0	0	0.0	0.0	373	100.0
Not known	8	0.0	0	0.0	0.0	0.0	8	0.0	0	0.0	0.0	0	0.0	0.0	8	100.0
Total	79,163	100.0	526	100.0	6.6	N/A	78,637	100.0	189	100.0	2.4	715	100.0	9.0	78,448	99.8

a. Total births includes live births and stillbirths, (live birth data obtained from VPDC).

b. Live births includes those babies who later died during the neonatal period (babies born alive who died within 28 days of birth).

c. Stillbirth rate is calculated using total births as the denominator and is expressed as deaths per 1,000 total births at that gestation.

d. Stillbirth risk is calculated using total births (still in utero at that gestation) as the denominator, and is expressed as deaths per 1,000 total births at or beyond that gestation.

e. Neonatal death rate is calculated using live births as the denominator, and is expressed as deaths per 1,000 live births at that gestation.

f. Perinatal death rate is calculated using total births as the denominator, and is expressed as deaths per 1,000 total births at that gestation.

N/A – not applicable

Table 12a: Birthweight and PMR_{Adjusted}, Victoria 2014

	Total births ^a		Stillbirths			Live births ^b		Neonatal deaths			Perinatal deaths			Live births surviving beyond neonatal period at each weight category	
	n	%	n	%	rate ^c	n	%	n	%	rate ^d	n	%	rate ^e	n	%
<500 g	292	0.4	193	36.7	661.0	99	0.1	88	38.3	888.9	281	37.2	962.3	11	11.1
500–999 g	418	0.5	119	22.6	284.7	299	0.4	60	26.1	200.7	179	23.7	428.2	239	79.9
1,000–1,499 g	524	0.7	49	9.3	93.5	475	0.6	16	7.0	33.7	65	8.6	124.0	459	96.6
1,500–1,999 g	1,098	1.4	28	5.3	25.5	1,070	1.4	8	3.5	7.5	36	4.8	32.8	1,062	99.3
2,000–2,499 g	3,205	4.1	33	6.3	10.3	3,172	4.0	13	5.7	4.1	46	6.1	14.4	3,159	99.6
2,500–2,999 g	12,441	15.8	33	6.3	2.7	12,408	15.8	13	5.7	1.0	46	6.1	3.7	12,395	99.9
3,000–3,499 g	28,977	36.7	45	8.6	1.6	28,932	36.9	18	7.8	0.6	63	8.3	2.2	28,914	99.9
3,500–3,999 g	23,279	29.5	16	3.0	0.7	23,263	29.7	7	3.0	0.3	23	3.0	1.0	23,256	100.0
>4,000 g	8,656	11.0	7	1.3	0.8	8,649	11.0	6	2.6	0.7	13	1.7	1.5	8,643	99.9
Not known	73	0.1	3	0.6	41.1	70	0.1	1	0.4	0.1	4	0.5	54.8	69	98.6
Total	78,963	100.0	526	100.0	6.7	78,437	100.0	230	100.0	2.9	756	100.0	9.6	78,207	99.7

a. Total births includes live births and stillbirths, (live birth data obtained from VPDC).

b. Live births includes those babies who later died during the neonatal period (babies born alive who died within 28 days of birth).

c. Stillbirth rate is calculated using total births as the denominator and is expressed as deaths per 1,000 total births of that birthweight category.

d. Neonatal death rate is calculated using live births as the denominator, and is expressed as deaths per 1,000 total births of that birthweight category.

e. Perinatal death rate is calculated using total births as the denominator, and is expressed as deaths per 1,000 total births of that birthweight category.

Table 12b: Birthweight and PMR_{Adjusted}, Victoria 2015

	Total births ^a		Stillbirths			Live births ^b		Neonatal deaths			Perinatal deaths			Live births surviving beyond neonatal period at each weight category	
	n	%	n	%	rate ^c	n	%	n	%	rate ^d	n	%	rate ^e	n	%
<500 g	324	0.4	202	38.4	623.5	122	0.2	60	31.7	491.8	262	36.6	808.6	62	50.8
500–999 g	409	0.5	149	28.3	364.3	260	0.3	54	28.6	207.7	203	28.4	496.3	206	79.2
1,000–1,499 g	471	0.6	36	6.8	76.4	435	0.6	9	4.8	20.7	45	6.3	95.5	426	97.9
1,500–1,999 g	1,017	1.3	23	4.4	22.6	994	1.3	11	5.8	11.1	34	4.8	33.4	983	98.9
2,000–2,499 g	3,324	4.2	31	5.9	9.3	3,293	4.2	17	9.0	5.2	48	6.7	14.4	3,276	99.5
2,500–2,999 g	12,738	16.1	38	7.2	3.0	12,700	16.2	13	6.9	1.0	51	7.1	4.0	12,687	99.9
3,000–3,499 g	28,847	36.4	24	4.6	0.8	28,823	36.7	11	5.8	0.4	35	4.9	1.2	28,812	100.0
3,500–3,999 g	23,701	29.9	17	3.2	0.7	23,684	30.2	10	4.3	0.4	27	3.8	1.1	23,674	100.0
> 4,000 g	8,332	10.5	6	1.1	0.7	8,326	10.6	4	2.1	0.5	10	1.4	1.2	8,322	100.0
Total	79,163	100.0	526	100.0	6.6	78,637	100.0	189	100.0	2.4	715	100.0	9.0	78,448	99.8

a. Total births includes live births and stillbirths, (live birth data obtained from VPDC).

b. Live births includes those babies who later died during the neonatal period (babies born alive who died within 28 days of birth).

c. Stillbirth rate is calculated using total births as the denominator and is expressed as deaths per 1,000 total births of that birthweight category.

d. Neonatal death rate is calculated using live births as the denominator, and is expressed as deaths per 1,000 total births of that birthweight category.

e. Perinatal death rate is calculated using total births as the denominator, and is expressed as deaths per 1,000 total births of that birthweight category.

Table 13a: PMR_{Adjusted} in singleton and multiple births, Victoria 2014

	Total births ^a		Stillbirths			Live births ^b		Neonatal deaths			Perinatal deaths			Live births surviving beyond neonatal period at each plurality category	
	n	%	n	%	rate ^c	n	%	n	%	rate ^d	n	%	rate ^e	n	%
Singleton births	76,542	96.9	470	89.4	6.1	76,072	97.0	176	76.5	2.3	646	85.4	8.4	75,896	99.8
Twin births	2,364	3.0	54	10.3	22.8	2,310	2.9	45	19.6	19.5	99	13.1	41.9	2,265	98.1
Triplet births	57	0.1	2	0.4	35.1	55	0.1	9	3.9	163.6	11	1.5	193.0	46	83.6
Quadruplets	0	0.0	0	0.0	0.0	0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
<i>(Multiples beyond twin)</i>	57	0.1	2	0.4	35.1	55	0.1	9	3.9	163.6	11	1.5	193.0	46	83.6
<i>(All multiple births)</i>	2,421	3.1	56	10.6	23.1	2,365	3.0	54	23.5	22.8	110	14.6	45.4	2,311	97.7
Unknown	0	0.0	0	0.0	0.0	0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Total births	78,963	100.0	526	100.0	6.7	78,437	100.0	230	100.0	2.9	756	100.0	9.6	78,207	99.7

a. Total births includes live births and stillbirths, (live birth data obtained from VPDC).

b. Live births includes those babies who later died during the neonatal period (babies born alive who died within 28 days of birth).

c. Stillbirth rate is calculated using total births as the denominator, and is expressed as deaths per 1,000 total births of that plurality

d. Neonatal mortality rate is calculated using live births as the denominator, and is expressed as deaths per 1,000 live births of that plurality.

e. Perinatal death rate is calculated using total births as the denominator, and is expressed as deaths per 1,000 total births of that plurality.

Table 13b: PMR_{Adjusted} in singleton and multiple births, Victoria 2015

	Total births ^a		Stillbirths			Live births ^b		Neonatal deaths			Perinatal deaths			Live births surviving beyond neonatal period at each plurality category	
	n	%	n	%	rate ^c	n	%	n	%	rate ^d	n	%	rate ^e	n	%
Singleton births	76,870	97.1	482	91.6	6.3	76,388	97.1	162	85.7	2.1	644	90.1	8.4	76,226	99.8
Twin births	2,230	2.8	40	7.6	17.9	2,190	2.8	26	13.8	11.9	66	9.2	29.6	2,164	98.8
Triplet births	63	0.1	4	0.8	63.5	59	0.1	1	0.5	16.9	5	0.7	79.4	58	98.3
Quadruplets	0	0.0	0	0.0	0.0	0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
<i>(Multiples beyond twin)</i>	63	0.1	4	0.8	63.5	59	0.1	1	0.5	16.9	5	0.7	79.4	58	98.3
<i>(All multiple births)</i>	2,293	2.9	44	8.4	19.2	2,249	2.9	27	14.3	12.0	71	9.9	31.0	2,222	98.8
Unknown	0	0.0	0	0.0	0.0	0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0
Total births	79,163	100.0	526	100.0	6.6	78,637	100.0	189	100.0	2.4	715	100.0	9.0	78,448	99.8

a. Total births includes live births and stillbirths, (live birth data obtained from VPDC).

b. Live births includes those babies who later died during the neonatal period (babies born alive who died within 28 days of birth).

c. Stillbirth rate is calculated using total births as the denominator, and is expressed as deaths per 1,000 total births of that plurality

d. Neonatal mortality rate is calculated using live births as the denominator, and is expressed as deaths per 1,000 live births of that plurality.

e. Perinatal death rate is calculated using total births as the denominator, and is expressed as deaths per 1,000 total births of that plurality.

Table 14: Stillbirth, neonatal death and PMR_{Adjusted} by plurality, Victoria 2007 to 2015

Year	Singletons		Twins		Other multiple births		Total	
	n	Rate	n	Rate	n	Rate	n	Rate
Stillbirths								
2007	462	6.6	44	18.0	2	40.8	508	7.0
2008	454	6.5	48	20.1	2	47.6	504	7.0
2009	496	7.0	57	23.8	0	NA	553	7.6
2010	499	7.0	45	19.6	3	55.6	547	7.4
2011	471	6.6	46	19.6	5	172.4	522	7.1
2012	479	6.3	45	18.9	3	73.2	527	6.7
2013	490	6.5	38	16.0	5	89.3	533	6.8
2014	470	6.1	54	22.8	2	35.1	526	6.7
2015	482	6.3	40	17.9	4	63.5	526	6.6
Neonatal deaths								
2007	196	2.8	43	17.6	2	42.6	241	3.4
2008	173	2.5	42	18.0	0	NA	215	3.0
2009	185	2.6	41	17.0	0	NA	226	3.1
2010	194	2.7	36	16.0	5	686.3	235	3.2
2011	184	2.6	39	17.6	0	NA	223	3.1
2012	180	2.4	29	12.4	1	26.3	210	2.7
2013	193	2.6	45	19.3	3	58.8	241	3.1
2014	176	2.3	45	19.5	9	163.6	230	2.9
2015	162	2.1	26	11.9	1	16.9	189	2.4
Perinatal deaths								
2007	658	9.4	87	35.0	4	81.6	749	10.4
2008	627	9.0	90	37.8	2	47.6	719	9.9
2009	681	9.7	98	40.9	0	NA	779	10.7
2010	693	9.7	81	35.2	8	740.7	782	10.6
2011	655	9.2	85	37.6	5	172.4	745	10.2
2012	659	8.7	74	31.1	4	97.6	737	9.4
2013	683	9.0	83	35.0	8	142.9	774	9.9
2014	646	8.4	99	41.9	11	193.0	756	9.6
2015	644	8.4	66	29.6	5	79.4	715	9.0

Source of adjusted total births denominator data: VPDC

Stillbirth and perinatal mortality rates were calculated using total births (live births and stillbirths) as the denominator. Neonatal mortality rates were calculated using live births as the denominator.

Table 15a: Perinatal mortality (adjusted) by maternal place of birth, Victoria 2014

	Live births	Stillbirths	Neonatal deaths	Perinatal deaths	% of all Perinatal deaths	PMR by maternal place of birth
Southern And Eastern Europe	1523	7	3	10	1.3	6.5
Americas	1039	4	1	5	0.7	4.8
North-East Asia	4106	21	10	31	4.1	7.5
South-East Asia	4877	28	13	41	5.4	8.4
Australia	50329	324	151	475	62.8	9.4
Southern and Central Asia	7319	61	19	80	10.6	10.8
North Africa and the Middle East	2637	24	7	31	4.1	11.6
North-West Europe	2253	20	8	28	3.7	12.3
Sub-Saharan Africa	1616	15	7	22	2.9	13.5
Oceania and Antarctica (Excl Australia)	2183	17	8	25	3.3	11.4
Missing	555	5	3	8	1.1	14.3
Total	78,437	526	230	756	100.0	9.6

Table 15b: Perinatal mortality (adjusted) by maternal place of birth, Victoria 2015

	Live births	Stillbirths	Neonatal deaths	Perinatal deaths	% of all Perinatal deaths	PMR by maternal place of birth
North-East Asia	3712	8	9	17	2.4	4.6
Americas	1110	4	2	6	0.8	5.4
North-West Europe	2290	11	6	17	2.4	7.4
North Africa and the Middle East	2762	13	8	21	2.9	7.6
South-East Asia	5064	27	15	42	5.9	8.2
Australia	50002	339	110	449	62.8	8.9
Southern and Eastern Europe	1437	11	4	15	2.1	10.4
Southern and Central Asia	7838	68	19	87	12.2	11.0
Oceania and Antarctica (Excl Australia)	2202	20	6	26	3.6	11.7
Sub-Saharan Africa	1686	18	7	25	3.5	14.7
Missing	534	7	3	10	1.4	18.5
Total	78,637	526	189	715	100.0	9.0

Table 16: Aboriginal and non-Aboriginal perinatal mortality (adjusted), by triennia, Victoria 2001–2015

	Total births			Live births			Stillbirths			Neonatal deaths (NND)			Stillbirth rate ^a			Neonatal mortality rate ^b			Perinatal mortality rate ^a			
	All births	Non ATSI	ATSI	All live births	Non ATSI	ATSI	Non ATSI	ATSI	ATSI	Non ATSI	ATSI	Non ATSI	ATSI	RR(CI)	ATSI	Non ATSI	RR(CI)	ATSI	Non ATSI	RR(CI)	ATSI	
2001–2003	188,625	187,413	1,212	187,390	186,196	1,194	1,217	18	658	10	6.5	14.9	2.3 (1.4–3.6)	8.4	10.0	23.1	2.4 (1.3–4.1)	23.1	10.0	2.4 (1.5–3.3)	23.1	10.0
2002–2004	189,996	188,768	1,228	188,780	187,565	1,215	1,203	13	657	14	6.4	10.6	1.7 (0.95–2.9)	11.5	9.9	22.0	3.3 (1.9–5.6)	22.0	9.9	3.3 (1.5–3.2)	22.0	9.9
2003–2005	193,381	192,039	1,342	192,188	190,807	1,331	1,232	11	676	14	6.4	8.2	1.3 (0.7–2.3)	10.5	9.9	18.6	3.2 (1.9–5.4)	18.6	9.9	3.2 (1.3–2.7)	18.6	9.9
2004–2006	199,615	198,076	1,539	198,328	196,797	1,531	1,279	8	665	16	6.5	5.2	0.8 (0.4–1.6)	10.5	9.8	15.6	3.1 (1.9–5.1)	15.6	9.8	3.1 (1.1–2.4)	15.6	9.8
2005–2007	208,448	206,643	1,805	207,024	205,234	1,790	1,409	15	701	15	6.8	8.3	1.2 (0.7–2.0)	8.4	10.2	16.6	2.4 (1.5–4.1)	16.6	10.2	2.4 (1.1–2.3)	16.6	10.2
2006–2008	214,322	212,324	1,998	212,784	210,806	1,978	1,518	20	668	16	7.1	10.0	1.4 (0.9–2.2)	8.1	10.3	18.0	2.5 (1.5–4.2)	18.0	10.3	2.5 (1.3–2.4)	18.0	10.3
2007–2009	216,598	214,332	2,266	214,994	212,763	2,231	1,569	35	656	13	7.3	15.4	2.1 (1.5–2.9)	5.8	10.4	21.2	1.9 (1.1–3.3)	21.2	10.4	1.9 (1.5–2.7)	21.2	10.4
2008–2010	218,514	216,054	2,460	216,898	214,480	2,418	1,574	42	642	16	7.3	17.1	2.3 (1.7–3.1)	6.6	10.3	23.6	2.2 (1.3–3.6)	23.6	10.3	2.2 (1.8–3.0)	23.6	10.3
2009–2011	219,762	217,095	2,667	218,161	215,536	2,625	1,559	42	647	16	7.2	15.7	2.2 (1.6–2.9)	6.1	10.2	21.7	2.0 (1.2–3.3)	21.7	10.2	2.0 (1.6–2.8)	21.7	10.2
2010–2012	225,185	222,403	2,782	223,599	220,857	2,742	1,546	40	642	14	7.0	14.4	2.1 (1.5–2.8)	5.1	9.8	19.4	1.7 (1.0–2.9)	19.4	9.8	1.7 (1.5–2.6)	19.4	9.8
2011–2013	228,955	226,038	2,917	227,380	224,499	2,881	1,539	36	648	16	6.8	12.3	1.8 (1.3–2.5)	5.6	9.7	17.8	1.9 (1.2–3.1)	17.8	9.7	1.9 (1.4–2.4)	17.8	9.7
2012–2014	234,000	230,977	3,023	232,421	229,431	2,990	1,546	33	652	19	6.7	10.9	1.6 (1.2–2.3)	6.4	9.5	17.2	2.2 (1.4–3.5)	17.2	9.5	2.2 (1.4–2.4)	17.2	9.5
2013–2015	235,174	231,944	3,230	233,598	230,391	3,207	1,553	23	631	21	6.7	7.1	1.1 (0.7–1.6)	6.5	9.4	13.6	2.4 (1.4–3.5)	13.6	9.4	2.4 (1.1–1.9)	13.6	9.4

Notes:

Source of total birth and live birth denominator data: VPDC.

ATSI: Infants born to women who identified themselves as Aboriginal or of Torres Strait Islander descent

Births in which Aboriginality was unknown are excluded from this table

Rolling triennia are used in this table

a. Stillbirth and perinatal mortality rates are calculated using adjusted total births as the denominator, and expressed as deaths per 1,000 adjusted total births.

b. Neonatal death rate is calculated using live births as the denominator, and is expressed as deaths per 1,000 live births.

Figure 4: PMR_{Adjusted} by Aboriginal status, by triennia, Victoria 2001–2015

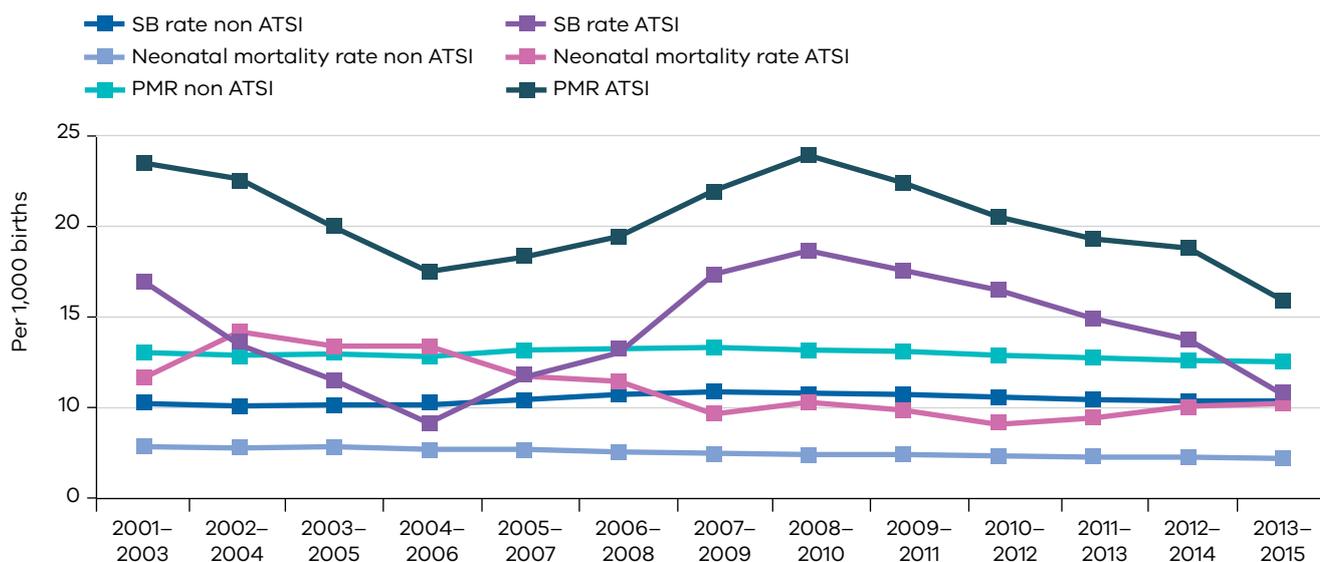


Table 17: PMR_{Adjusted} by Aboriginal status, by triennia, Victoria 2001–2015

	SB rate non ATSI	Neonatal mortality rate non ATSI	PMR non ATSI	SB rate ATSI	Neonatal mortality rate ATSI	PMR ATSI
2001–2003	6.5	3.5	10.0	14.9	8.4	23.1
2002–2004	6.4	3.5	9.9	10.6	11.5	22.0
2003–2005	6.4	3.5	9.9	8.2	10.5	18.6
2004–2006	6.5	3.4	9.8	5.2	10.5	15.6
2005–2007	6.8	3.4	10.2	8.3	8.4	16.6
2006–2008	7.1	3.2	10.3	10.0	8.1	18.0
2007–2009	7.3	3.1	10.4	15.4	5.8	21.2
2008–2010	7.3	3.0	10.3	17.1	6.6	23.6
2009–2011	7.2	3.0	10.2	15.7	6.1	21.7
2010–2012	7.0	2.9	9.8	14.4	5.1	19.4
2011–2013	6.8	2.9	9.7	12.3	5.6	17.8
2012–2014	6.7	2.8	9.5	10.9	6.4	17.2
2013–2015	6.7	2.7	9.4	7.1	6.5	13.6

Table 18a: Perinatal deaths by PSANZ PDC major categories and type, Victoria 2014

Cause of death PSANZ PDC	Stillbirths			Stillbirth (adjusted)			Neonatal deaths			Total perinatal deaths			Total perinatal deaths (adjusted)		
	n	%	Rate ^c	n	%	Rate ^e	n	%	Rate ^c	n	%	Rate ^c	n	%	Rate ^e
1. Congenital abnormality ^a	170	25.3	2.1	170	32.3	2.2	76	32.9	1.0	246	27.2	3.1	246	32.5	3.1
2. Infection	22	3.3	0.3	22	4.2	0.3	13	5.6	0.2	35	3.9	0.4	35	4.6	0.4
3. Hypertension	12	1.8	0.2	12	2.3	0.2	2	0.9	0.0	14	1.6	0.2	14	1.9	0.2
4. Antepartum haemorrhage	47	7.0	0.6	47	8.9	0.6	21	9.1	0.3	68	7.5	0.9	68	9.0	0.9
5. Maternal conditions ^b	169	25.1	2.1	23	4.4	0.3	7	3.0	0.1	176	19.5	2.2	29	3.8	0.4
6. Specific perinatal conditions ^d	33	4.9	0.4	33	6.3	0.4	23	10.0	0.3	56	6.2	0.7	56	7.4	0.7
7. Hypoxic peripartum death	13	1.9	0.2	13	2.5	0.2	17	7.4	0.2	30	3.3	0.4	30	4.0	0.4
8. Fetal growth restriction (FGR)	46	6.8	0.6	46	8.7	0.6	4	1.7	0.1	50	5.5	0.6	50	6.6	0.6
9. Spontaneous preterm	40	6.0	0.5	40	7.6	0.5	64	27.7	0.8	104	11.5	1.3	104	13.8	1.3
10. Unexplained antepartum death	120	17.9	1.5	120	22.8	1.5	0	0.0	0.0	120	13.3	1.5	120	15.9	1.5
11. No obstetric antecedent	0	0.0	0.0	0	0.0	0.0	4	1.7	0.1	4	0.4	0.1	4	0.5	0.1
Total	672	100	8.5	526	100.0	6.7	231	100.0	2.9	903	100.0	11.4	756	100.0	9.6

a. Maternal conditions includes terminations of pregnancy ≥ 20 weeks for psychosocial indications.

b. Stillbirth and perinatal death rates were calculated using total births (live births and stillbirths) as the denominator. Neonatal death rates were calculated using live births as the denominator.

c. Specific perinatal conditions includes termination for suspected but not confirmed congenital abnormalities.

d. Adjusted stillbirth and adjusted perinatal rates are calculated using live births and adjusted stillbirths and neonatal deaths (not including terminations of pregnancy for maternal psychosocial indications) as the denominator.

Table 18b: Perinatal deaths by PSANZ PDC major categories and type, Victoria 2015

Cause of death PSANZ PDC	Stillbirths			Stillbirth (adjusted)			Neonatal deaths			Total perinatal deaths			Total perinatal deaths (adjusted)		
	n	%	Rate ^b	n	%	Rate ^d	n	%	Rate ^b	n	%	Rate ^b	n	%	Rate ^d
1. Congenital abnormality ^a	208	32.9	2.6	208	39.5	2.6	66	34.9	0.8	274	33.3	3.5	274	38.3	3.5
2. Infection	26	4.1	0.3	26	4.9	0.3	12	6.3	0.2	38	4.6	0.5	38	5.3	0.5
3. Hypertension	14	2.2	0.2	14	2.7	0.2	2	1.1	0.0	16	1.9	0.2	16	2.2	0.2
4. Antepartum haemorrhage	25	3.9	0.3	25	4.8	0.3	22	11.6	0.3	47	5.7	0.6	47	6.6	0.6
5. Maternal conditions ^c	116	18.3	1.5	9	1.7	0.1	1	0.5	0.0	117	14.2	1.5	10	1.4	0.1
6. Specific perinatal conditions ^d	43	6.8	0.5	43	8.2	0.5	17	9.0	0.2	60	7.3	0.8	60	8.4	0.8
7. Hypoxic peripartum death	6	0.9	0.1	6	1.1	0.1	11	5.8	0.1	17	2.1	0.2	17	2.4	0.2
8. Fetal growth restriction (FGR)	48	7.6	0.6	48	9.1	0.6	0	0.0	0.0	48	5.8	0.6	48	6.7	0.6
9. Spontaneous preterm	54	8.5	0.7	54	10.3	0.7	49	25.9	0.6	103	12.5	1.3	103	14.4	1.3
10. Unexplained antepartum death	93	14.7	1.2	93	17.7	1.2	0	0.0	0.0	93	11.3	1.2	93	13.0	1.2
11. No obstetric antecedent	0	0.0	0.0	0	0.0	0.0	9	4.8	0.1	9	1.1	0.1	9	1.3	0.1
Total	633	100.0	8.0	526	100.0	6.7	189	100.0	2.4	822	100.0	10.4	715	100.0	9.0

a. Maternal conditions includes terminations of pregnancy ≥ 20 weeks for psychosocial indications.

b. Stillbirth and perinatal death rates were calculated using total births (live births and stillbirths) as the denominator. Neonatal death rates were calculated using live births as the denominator.

c. Specific perinatal conditions includes termination for suspected but not confirmed congenital abnormalities.

d. Adjusted stillbirth and adjusted perinatal rates are calculated using live births and adjusted stillbirths and neonatal deaths (not including terminations of pregnancy for maternal psychosocial indications) as the denominator.

Figure 5a: Causes of perinatal death (%), PSANZ PDC, Victoria 2014

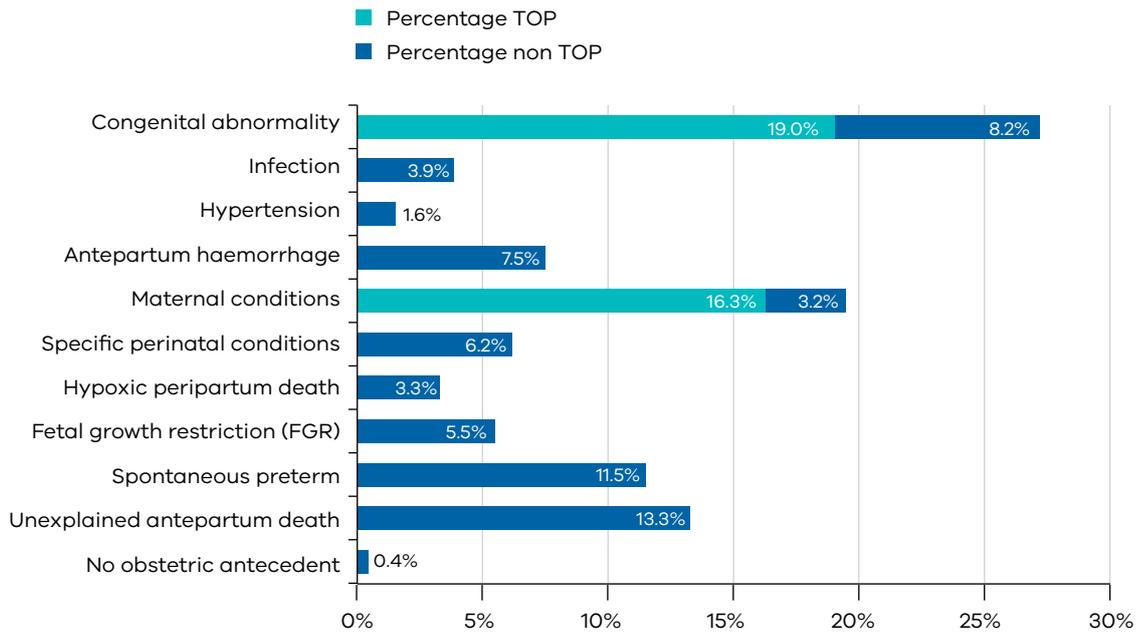


Figure 5b: Causes of perinatal death (%), PSANZ PDC, Victoria 2015

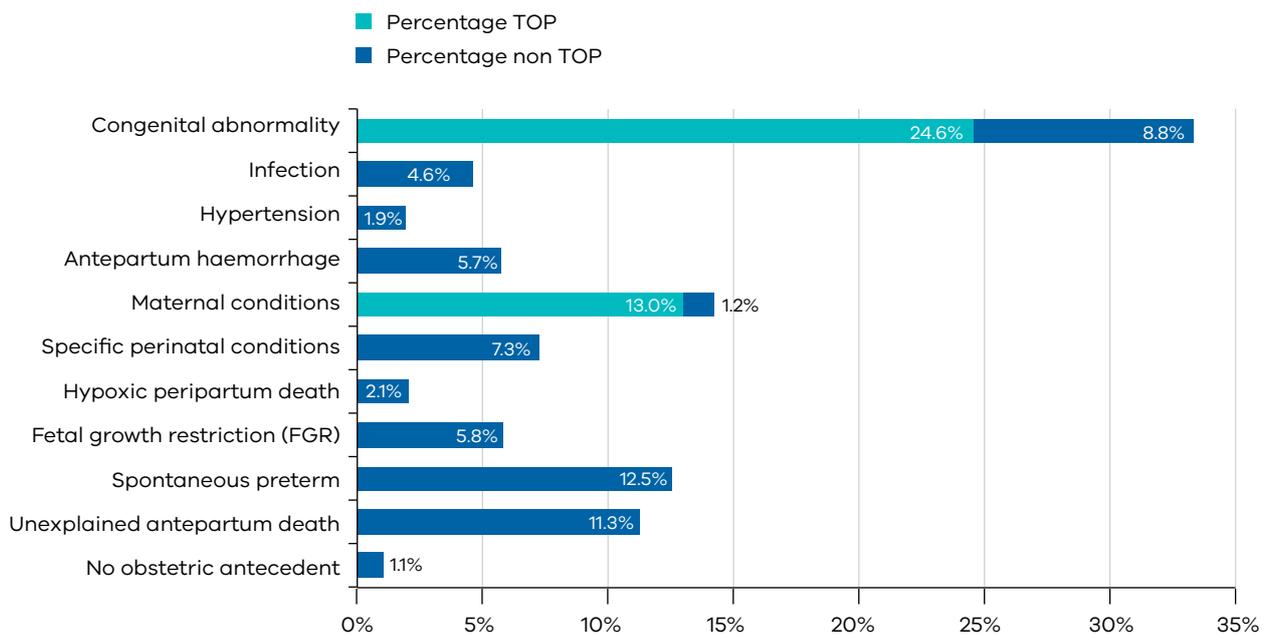


Figure 6a: Causes of stillbirth (%), PSANZ PDC, Victoria 2014

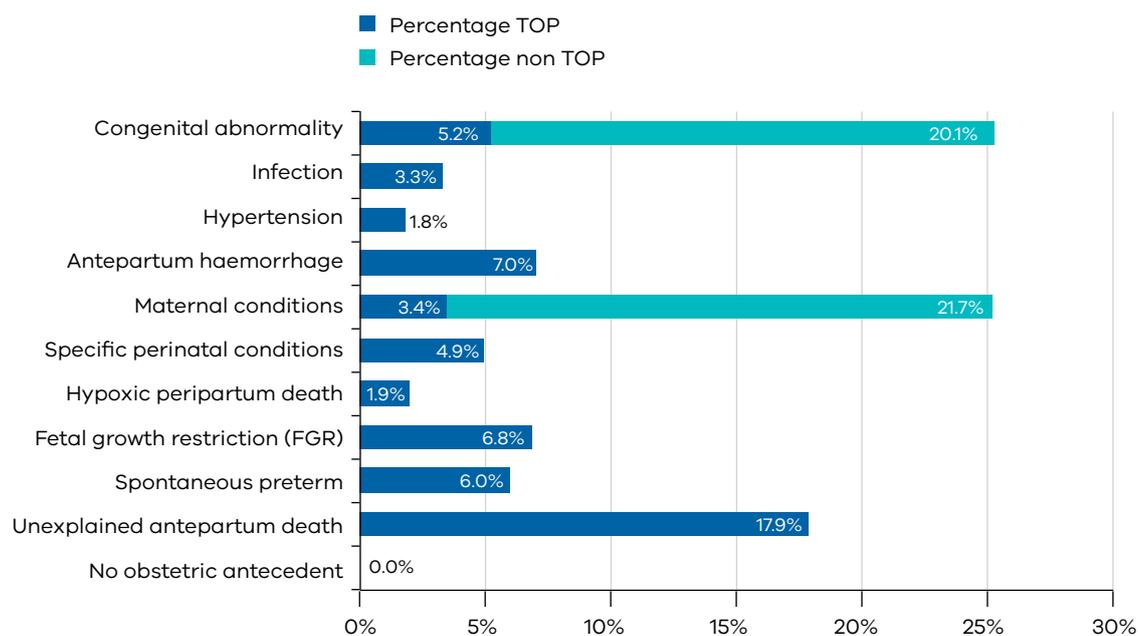


Figure 6b: Causes of stillbirth (%), PSANZ PDC, Victoria 2015

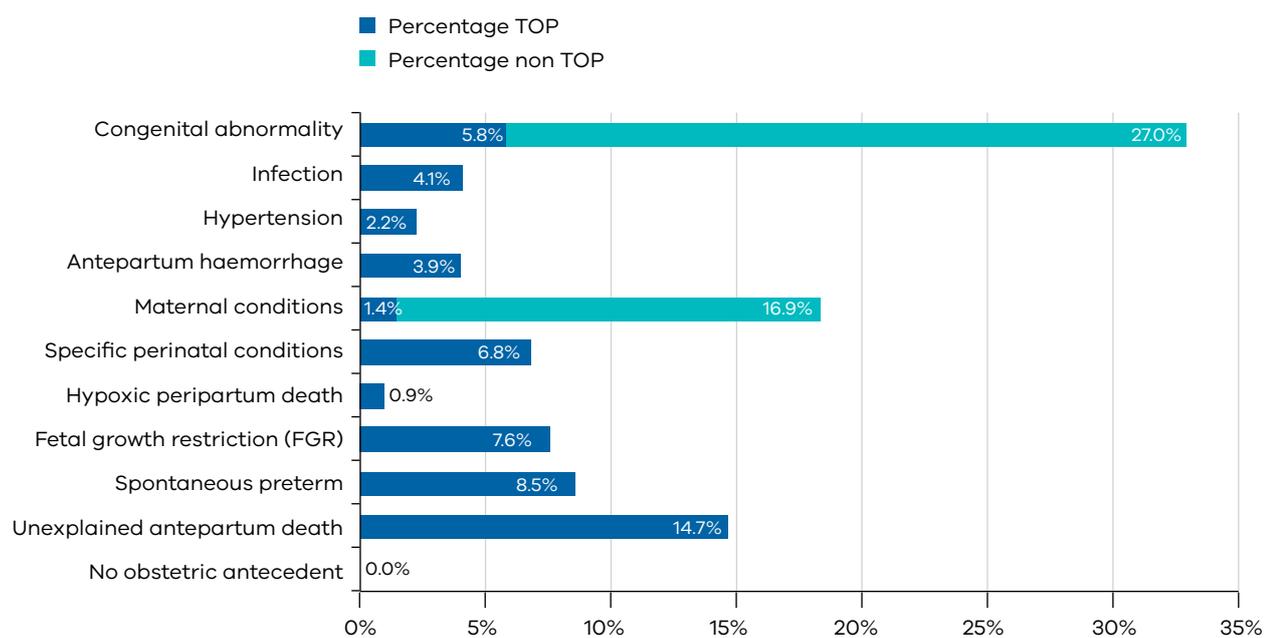


Figure 7a: Causes of neonatal death (%), PSANZ PDC, Victoria 2014

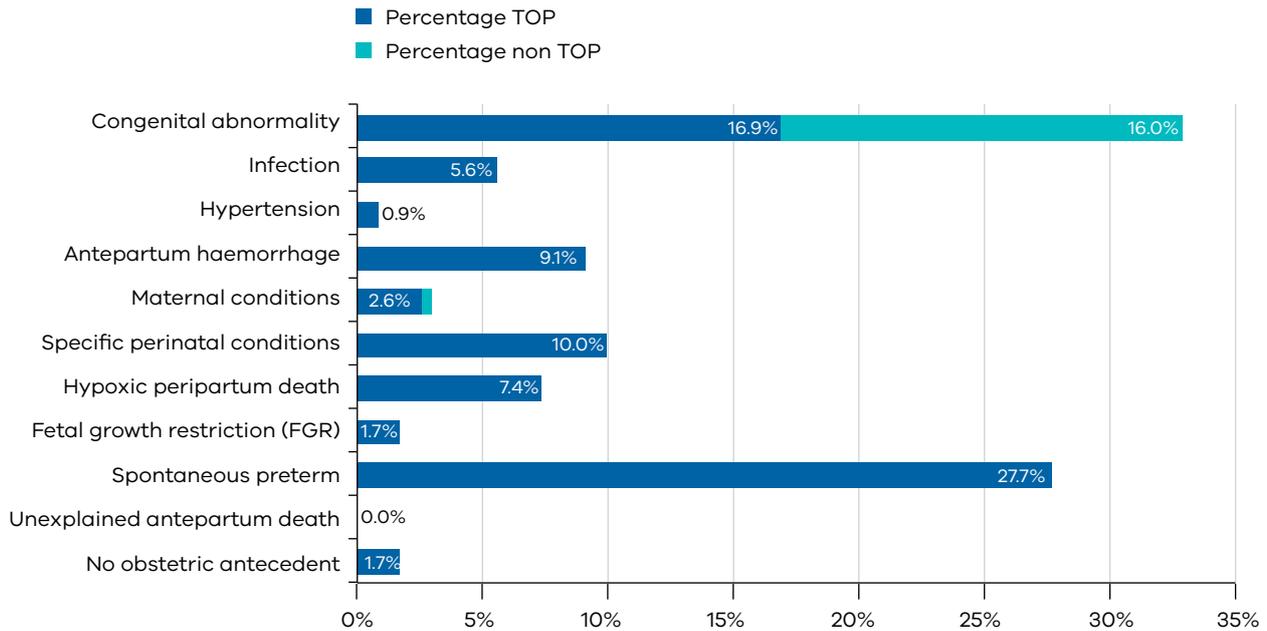


Figure 7b: Causes of neonatal death (%), PSANZ PDC, Victoria 2015

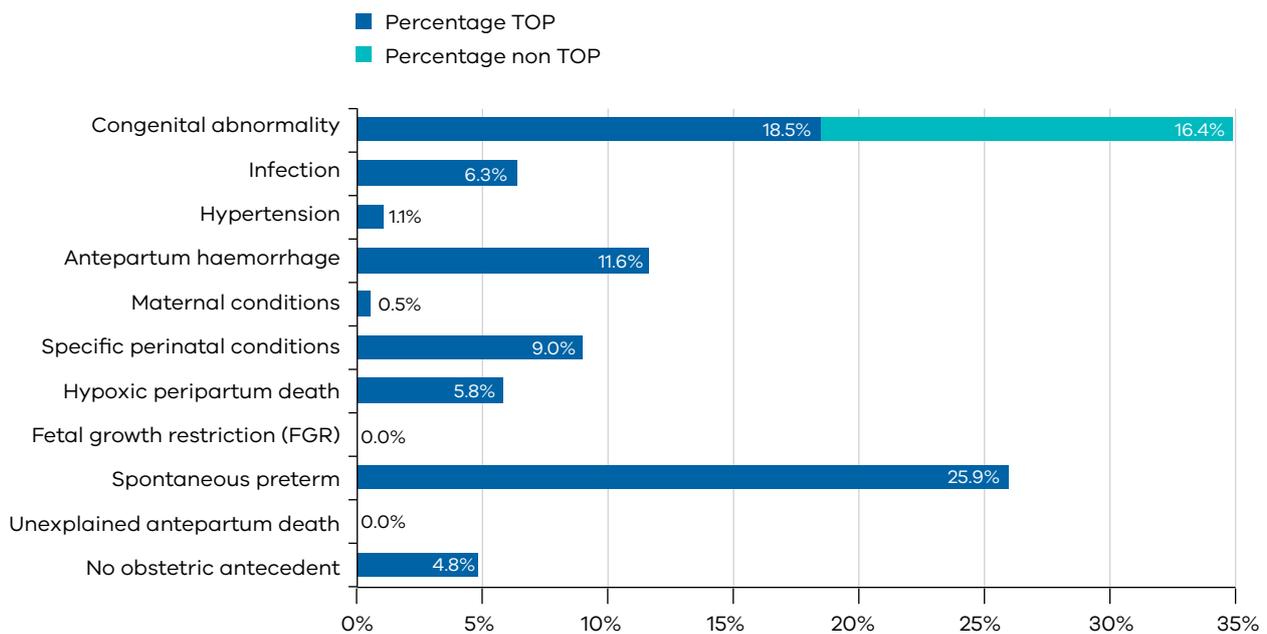


Table 19a: Perinatal deaths by PSANZ PDC expanded categories and type, Victoria 2014

PSANZ PDC	Stillbirths (Fetal death)		Neonatal death		Total	
	n	%	n	%	n	%
1. Congenital Abnormality	170	25.3	76	32.9	246	27.2
1.1 Central nervous system abnormalities	3	0.4	7	3.0	10	1.1
TOP Central nervous system abnormalities	43	6.4	8	3.5	51	5.6
1.2 Cardiovascular system	5	0.7	11	4.8	16	1.8
TOP Cardiovascular system	11	1.6	13	5.6	24	2.7
1.3 Urinary Tract	0	0.0	2	0.9	2	0.2
TOP Urinary Tract	8	1.2	3	1.3	11	1.2
1.4 Gastrointestinal	0	0.0	0	0.0	0	0.0
TOP Gastrointestinal	4	0.6	0	0.0	4	0.4
1.5 Chromosomal	17	2.5	7	3.0	24	2.7
TOP Chromosomal	39	5.8	7	3.0	46	5.1
1.6 Metabolic	0	0.0	1	0.4	1	0.1
TOP Metabolic	0	0.0	0	0.0	0	0.0
1.7 Multiple	4	0.6	1	0.4	5	0.6
TOP Multiple	18	2.7	2	0.9	20	2.2
1.8 Other congenital abnormality	0	0.0	0	0.0	0	0.0
TOP Other congenital abnormality	1	0.1	0	0.0	1	0.1
1.81 Musculoskeletal	2	0.3	5	2.2	7	0.8
TOP Musculoskeletal	7	1.0	2	0.9	9	1.0
1.82 Respiratory	1	0.1	1	0.4	2	0.2
TOP Respiratory	0	0.0	0	0.0	0	0.0
1.83 Diaphragmatic hernia	0	0.0	2	0.9	2	0.2
TOP Diaphragmatic hernia	2	0.3	1	0.4	3	0.3
1.84 Haematological	0	0.0	1	0.4	1	0.1
Haematological (termination)	0	0.0	0	0.0	0	0.0
1.85 Tumours	1	0.1	1	0.4	2	0.2
TOP Tumours	1	0.1	1	0.4	2	0.2
1.88 Other specified congenital abnormality	2	0.3	0	0.0	2	0.2
TOP Other specified congenital abnormality	1	0.1	0	0.0	1	0.1
1.9 Unspecified congenital abnormality	0	0.0	0	0.0	0	0.0
TOP Other specified congenital abnormality	0	0.0	0	0.0	0	0.0
2. Infection	22	3.3	13	5.6	35	3.9
2.11 Group B Streptococcus	2	0.3	3	1.3	5	0.6
2.12 E coli	7	1.0	1	0.4	8	0.9
2.13 Listeria	0	0.0	1	0.4	1	0.1
2.18 Other bacterial	6	0.9	1	0.4	7	0.8
2.19 Unspecified bacterial	2	0.3	0	0.0	2	0.2
2.2 Perinatal infection						
2.21 Perinatal infection (Viral) – Cytomegalovirus	2	0.3	0	0.0	2	0.2
2.22 Parvovirus	0	0.0	0	0.0	0	0.0
2.24 Rubella	0	0.0	0	0.0	0	0.0

PSANZ PDC	Stillbirths (Fetal death)		Neonatal death		Total	
	n	%	n	%	n	%
2.28 Other viral	0	0.0	1	0.4	1	0.1
2.29 Unspecified viral	0	0.0	0	0.0	0	0.0
2.3 Protozoal e.g. toxoplasma	1	0.1	0	0.0	1	0.1
2.5 Fungal	0	0.0	0	0.0	0	0.0
2.8 other unspecified organism	0	0.0	0	0.0	0	0.0
2.9 other unspecified organism	2	0.3	6	2.6	8	0.9
3. Hypertension	12	1.8	2	0.9	14	1.6
3.1 Chronic hypertension: essential	0	0.0	0	0.0	0	0.0
3.2 Chronic hypertension: secondary e.g. renal disease	0	0.0	0	0.0	0	0.0
3.3 Chronic hypertension: unspecified	0	0.0	0	0.0	0	0.0
3.4 Gestational Hypertension	0	0.0	0	0.0	0	0.0
3.5 Pre-eclampsia	10	1.5	2	0.9	12	1.3
3.51 Pre-eclampsia with evidence thrombophilia	1	0.1	0	0.0	1	0.1
3.6 Pre-eclampsia superimposed on chronic hypertension	1	0.1	0	0.0	1	0.1
3.9 Unspecified hypertension	0	0.0	0	0.0	0	0.0
4. Antepartum Haemorrhage	47	7.0	21	9.1	68	7.5
4.1 Placental abruption	38	5.7	19	8.2	57	6.3
4.11 Placental abruption with laboratory evidence of Thrombophilia	2	0.3	1	0.4	3	0.3
4.2 Placenta praevia	1	0.1	0	0.0	1	0.1
4.3 Vasa Praevia	0	0.0	1	0.4	1	0.1
4.8 Other APH	0	0.0	0	0.0	0	0.0
4.9 APH of unknown origin	6	0.9	0	0.0	6	0.7
5. Maternal Conditions	169	25.1	7	3.0	176	19.5
5.1 TOP maternal psychosocial indications	146	21.7	1	0.4	147	16.3
5.2 Diabetes/gestational diabetes	12	1.8	0	0.0	12	1.3
5.3 Maternal injury		0.0	0	0.0	0	0.0
5.31 Maternal injury (accidental)	1	0.1	0	0.0	1	0.1
5.32 Maternal injury (non-accidental)	0	0.0	0	0.0	0	0.0
5.4 Maternal sepsis	2	0.3	0	0.0	2	0.2
5.5 Antiphospholipid syndrome	3	0.4	1	0.4	4	0.4
5.6 Obstetric cholestasis	2	0.3	0	0.0	2	0.2
5.8 Other specified maternal conditions	3	0.4	5	2.2	8	0.9
6. Specific Perinatal Conditions	33	4.9	23	10.0	56	6.2
6.1 Twin-twin transfusion	7	1.0	11	4.8	18	2.0
6.2 Fetomaternal haemorrhage	3	0.4	2	0.9	5	0.6
6.30 Antepartum cord complications	0	0.0	0	0.0	0	0.0
6.31 Antepartum cord complications (Cord haemorrhage)	0	0.0	0	0.0	0	0.0
6.32 Antepartum cord complications (True knot with evidence of occlusion)	1	0.1	0	0.0	1	0.1
6.38 Antepartum cord complications (Other)	5	0.7	0	0.0	5	0.6

PSANZ PDC	Stillbirths (Fetal death)		Neonatal death		Total	
	n	%	n	%	n	%
6.39 Antepartum cord complications (Unspecified)	0	0.0	0	0.0	0	0.0
6.4 Uterine abnormalities	9	1.3	5	2.2	14	1.6
6.5 Birth trauma	0	0.0	1	0.4	1	0.1
6.61 Alloimmune disease: Rhesus	1	0.1	0	0.0	1	0.1
6.7 Idiopathic hydrops	2	0.3	4	1.7	6	0.7
6.8 Other specific perinatal conditions	0	0.0	0	0.0	0	0.0
6.81 Rupture of membranes after amniocentesis	0	0.0	0	0.0	0	0.0
6.82 TOP for suspected but not confirmed CA	0	0.0	0	0.0	0	0.0
6.88 Other	5	0.7	0	0.0	5	0.6
6.89 Unspecified	0	0.0	0	0.0	0	0.0
7. Hypoxic Peripartum Death	13	1.9	17	7.4	30	3.3
7.1 Uterine rupture	2	0.3	1	0.4	3	0.3
7.12 Cord prolapse	0	0.0	2	0.9	2	0.2
7.13 Shoulder dystocia	0	0.0	1		1	0.1
7.18 Other intrapartum complication	1	0.1	2	0.9	3	0.3
7.2 No intrapartum complication (evidence of non-reassuring fetal status)	9	1.3	10	4.3	19	2.1
7.3 No intrapartum complication (no evidence of non-reassuring fetal status)	0	0.0	0	0.0	0	0.0
7.9 Unspecified hypoxic peripartum death	1	0.1	1	0.4	2	0.2
8. Fetal Growth Restriction (FGR)	46	6.8	4	1.7	50	5.5
8.1 Evidence of uteroplacental insufficiency	31	4.6	2	0.9	33	3.7
8.2. With chronic villitis	2	0.3	0	0.0	2	0.2
8.3 No placental pathology	11	1.6	0	0.0	11	1.2
8.4 No examination of placenta	0	0.0	1	0.4	1	0.1
8.8 Other specified placental pathology	1	0.1	0	0.0	1	0.1
8.9 Unspecified or not known whether placenta examined	1	0.1	1	0.4	2	0.2
9. Spontaneous Preterm	40	6.0	64	27.7	104	11.5
9.10 Spontaneous preterm with intact membranes or membrane rupture <24hrs before delivery	0	0.0	0	0.0	0	0.0
9.11 Chorioamnionitis (placental histology)	4	0.6	16	6.9	20	2.2
9.12 No chorioamnionitis (placental histology)	1	0.1	16	6.9	17	1.9
9.13 With clinical evidence of chorioamnionitis, no examination of placenta	2	0.3	1	0.4	3	0.3
9.17 No clinical signs of chorioamnionitis, no examination of placenta	4	0.6	6	2.6	10	1.1
9.19 Unspecified or not known whether placenta examined	0	0.0	0	0.0	0	0.0
9.20 Spontaneous preterm with intact membranes or membrane rupture <24hrs before delivery	0	0.0	0	0.0	0	0.0
9.21 Chorioamnionitis (placental histology)	12	1.8	13	5.6	25	2.8
9.22 No chorioamnionitis (placental histology)	2	0.3	8	3.5	10	1.1
9.23 With clinical evidence of chorioamnionitis, no examination of placenta	2	0.3	0	0.0	2	0.2

PSANZ PDC	Stillbirths (Fetal death)		Neonatal death		Total	
	n	%	n	%	n	%
9.27 No clinical signs of chorioamnionitis, no examination of placenta	9	1.3	0	0.0	9	1.0
9.29 Unspecified or not known whether placenta examined	2	0.3	1	0.4	3	0.3
9.31 Chorioamnionitis (placental histology)	1	0.1	2	0.9	3	0.3
9.32 No chorioamnionitis (placental histology)	1	0.1	1	0.4	2	0.2
9.33 With clinical evidence of chorioamnionitis, no examination of placenta	0	0.0	0	0.0	0	0.0
9.37 No clinical signs of chorioamnionitis, no examination of placenta	0	0.0	0	0.0	0	0.0
9.39 Unspecified or not known whether placenta examined	0	0.0	0	0.0	0	0.0
10. Unexplained Antepartum Death	120	17.9	0	0	120	13.3
10.1 Evidence of uteroplacental insufficiency	12	1.8	0	0	12	1.3
10.2 With chronic villitis	3	0.4	0	0	3	0.3
10.3 No placental pathology	93	13.8	0	0	93	10.3
10.4 No examination of placenta	5	0.7	0	0	5	0.6
10.8 Other specified placental pathology	1	0.1	0	0	1	0.1
10.9 Unspecified or not known whether placenta examined	6	0.9	0	0	6	0.7
11. No Obstetric Antecedent	0	0.0	4	1.7	4	0.4
11.2 Postnatally acquired infection	0	0.0	2	0.9	2	0.2
11.13 No obstetric antecedent – Sudden Infant Death Syndrome (SIDS) (SIDS Category II : Infant deaths that meet Category I except for one or more features.)	0	0.0	0	0.0	0	0.0
11.2 No obstetric antecedent – Postnatally acquired infection	0	0.0	0	0.0	0	0.0
11.9 No obstetric precedent – Unknown/undetermined	0	0.0	1	0.4	1	0.1
11.92 No obstetric antecedent – Unknown/undetermined (Other unknown/undetermined)	0	0.0	1	0.4	1	0.1
Total	672	100	231	100	903	100

Table 19b: Perinatal deaths by PSANZ PDC expanded categories and type, Victoria 2015

PSANZ PDC	Stillbirths (Fetal death)		Neonatal death		Total	
	n	%	n	%	n	%
1. Congenital Abnormality	208	32.9	66	34.9	274	33.3
1.1 Central nervous system abnormalities	4	0.6	12	6.3	16	1.9
TOP Central nervous system abnormalities	53	8.4	8	4.2	61	7.4
1.2 Cardiovascular system	2	0.3	7	3.7	9	1.1
TOP Cardiovascular system	29	4.6	4	2.1	33	4.0
1.3 Urinary Tract	0	0.0	2	1.1	2	0.2
TOP Urinary Tract	9	1.4	3	1.6	12	1.5
1.4 Gastrointestinal	2	0.3	0	0.0	2	0.2
TOP Gastrointestinal	1	0.2	1	0.5	2	0.2
1.5 Chromosomal	19	3.0	5	2.6	24	2.9
TOP Chromosomal	35	5.5	6	3.2	41	5.0
1.6 Metabolic	0	0.0	0	0.0	0	0.0
TOP Metabolic	0	0.0	0	0.0	0	0.0
1.7 Multiple	8	1.3	4	2.1	12	1.5
TOP Multiple	23	3.6	5	2.6	28	3.4
1.8 Other congenital abnormality	0	0.0	0	0.0	0	0.0
TOP Other congenital abnormality	0	0.0	0	0.0	0	0.0
1.81 Musculoskeletal	0	0.0	3	1.6	3	0.4
TOP Musculoskeletal	14	2.2	3	1.6	17	2.1
1.82 Respiratory	0	0.0	0	0.0	0	0.0
TOP Respiratory	2	0.3	0	0.0	2	0.2
1.83 Diaphragmatic hernia	0	0.0	0	0.0	0	0.0
TOP Diaphragmatic hernia	4	0.6	0	0.0	4	0.5
1.84 Haematological	0	0.0	1	0.5	1	0.1
Haematological (termination)	0	0.0	0	0.0	0	0.0
1.85 Tumours	2	0.3	1	0.5	3	0.4
TOP Tumours	1	0.2	0	0.0	1	0.1
1.88 Other specified congenital abnormality	0	0.0	0	0.0	0	0.0
TOP Other specified congenital abnormality	0	0.0	1	0.5	1	0.1
1.9 Unspecified congenital abnormality		0.0		0.0	0	0.0
TOP Other specified congenital abnormality		0.0		0.0	0	0.0
2. Infection	26	4.1	12	6.3	38	4.6
2.11 Group B Streptococcus	7	1.1	3	1.6	10	1.2
2.12 E coli	6	0.9	0	0.0	6	0.7
2.13 Listeria	0	0.0	0	0.0	0	0.0
2.18 Other bacterial	4	0.6	1	0.5	5	0.6
2.19 Unspecified bacterial	2	0.3	1	0.5	3	0.4
2.2 Perinatal infection	0	0.0	0	0.0	0	0.0
2.21 Perinatal infection (Viral) – Cytomegalovirus	3	0.5	0	0.0	3	0.4
2.22 Parvovirus	0	0.0	0	0.0	0	0.0
2.24 Rubella	0	0.0	0	0.0	0	0.0

PSANZ PDC	Stillbirths (Fetal death)		Neonatal death		Total	
	n	%	n	%	n	%
2.28 Other viral	0	0.0	0	0.0	0	0.0
2.29 Unspecified viral	1	0.2	0	0.0	1	0.1
2.3 Protozoal e.g. toxoplasma	0	0.0	0	0.0	0	0.0
2.5 Fungal	0	0.0	0	0.0	0	0.0
2.8 Other specified organism	0	0.0	0	0.0	0	0.0
2.9 Other unspecified organism	3	0.5	7	3.7	10	1.2
3. Hypertension	14	2.2	2	1.1	16	1.9
3.1 Chronic hypertension: essential	1	0.2	0	0.0	1	0.1
3.2 Chronic hypertension: secondary e.g renal disease		0.0		0.0	0	0.0
3.3 Chronic hypertension: unspecified		0.0		0.0	0	0.0
3.4 Gestational Hypertension		0.0		0.0	0	0.0
3.5 Pre-eclampsia	10	1.6	2	1.1	12	1.5
3.51 Pre-eclampsia with evidence thrombophilia		0.0		0.0	0	0.0
3.6 Pre-eclampsia superimposed on chronic hypertension	2	0.3	0	0.0	2	0.2
3.61 Pre-eclampsia superimposed on chronic hypertension with laboratory evidence of thrombophilia	1		0			
3.9 Unspecified hypertension		0.0		0.0	0	0.0
4. Antepartum Haemorrhage	25	3.9	22	11.6	47	5.7
4.1 Placental abruption	23	3.6	19	10.1	42	5.1
4.11 Placental abruption with laboratory evidence of Thrombophilia		0.0		0.0	0	0.0
4.2 Placenta praevia		0.0		0.0	0	0.0
4.3 Vasa Praevia	1	0.2	0	0.0	1	0.1
4.8 Other APH		0.0		0.0	0	0.0
4.9 APH of unknown origin	1	0.2	3	1.6	4	0.5
5. Maternal Conditions	116	18.3	1	0.5	117	14.2
5.1 TOP maternal psychosocial indications	107	16.9	0	0.0	107	13.0
5.2 Diabetes/gestational diabetes	5	0.8	0	0.0	5	0.6
5.3 Maternal injury		0.0		0.0	0	0.0
5.31 Maternal injury (accidental)		0.0		0.0	0	0.0
5.32 Maternal injury (non-accidental)		0.0		0.0	0	0.0
5.4 Maternal sepsis		0.0		0.0	0	0.0
5.5 Antiphospholipid syndrome	2	0.3	1	0.5	3	0.4
5.6 Obstetric cholestasis	1	0.2	0	0.0	1	0.1
5.8 Other specified maternal conditions	1	0.2	0	0.0	1	0.1
6. Specific Perinatal Conditions	43	6.8	17	9.0	60	7.3
6.1 Twin-twin transfusion	8	1.3	2	1.1	10	1.2
6.2 Fetomaternal haemorrhage	8	1.3	2	1.1	10	1.2
6.30 Antepartum cord complications		0.0		0.0	0	0.0
6.31 Antepartum cord complications (Cord haemorrhage)	3	0.5	0	0.0	3	0.4

PSANZ PDC	Stillbirths (Fetal death)		Neonatal death		Total	
	n	%	n	%	n	%
6.32 Antepartum cord complications (True knot with evidence of occlusion)	7	1.1	0	0.0	7	0.9
6.38 Antepartum cord complications (Other)	6	0.9	0	0.0	6	0.7
6.39 Antepartum cord complications (Unspecified)		0.0		0.0	0	0.0
6.4 Uterine abnormalities	5	0.8	7	3.7	12	1.5
6.5 Birth trauma	0	0.0	3	1.6	3	0.4
6.61 Alloimmune disease: Rhesus	2	0.3	0	0.0	2	0.2
6.7 Idiopathic hydrops	3	0.5	3	1.6	6	0.7
6.8 Other specific perinatal conditions		0.0		0.0	0	0.0
6.810 Rupture of membranes after amniocentesis		0.0		0.0	0	0.0
6.82 TOP for suspected but not confirmed CA		0.0		0.0	0	0.0
6.88 Other	1	0.2	0	0.0	1	0.1
6.89 Unspecified		0.0		0.0	0	0.0
7. Hypoxic Peripartum Death	6	0.9	11	5.8	17	2.1
7.10 Hypoxic peripartum death	0	0.0	1	0.5	1	0.1
7.11 Uterine rupture	0	0.0	2	1.1	2	0.2
7.12 Cord prolapse	1	0.2	0	0.0	1	0.1
7.13 Shoulder dystocia		0.0			0	0.0
7.18 Other intrapartum complication	0	0.0	1	0.5	1	0.1
7.2 No intrapartum complication (evidence of non-reassuring fetal status)	2	0.3	7	3.7	9	1.1
7.3 No intrapartum complication (no evidence of non-reassuring fetal status)	1	0.2	0	0.0	1	0.1
7.9 Unspecified hypoxic peripartum death	2	0.3	0	0.0	2	0.2
8. Fetal Growth Restriction (FGR)	48	7.6	0	0.0	48	5.8
8.1 Evidence of uteroplacental insufficiency	26	4.1	0	0.0	26	3.2
8.2. With chronic villitis	2	0.3	0	0.0	2	0.2
8.3 No placental pathology	12	1.9	0	0.0	12	1.5
8.4 No examination of placenta	3	0.5	0	0.0	3	0.4
8.8 Other specified placental pathology	2	0.3	0	0.0	2	0.2
8.9 Unspecified or not known whether placenta examined	3	0.5	0	0.0	3	0.4
9. Spontaneous Preterm	54	8.5	49	25.9	103	12.5
9.10 Spontaneous preterm with intact membranes or membrane rupture < 24hrs before delivery		0.0		0.0	0	0.0
9.11 Chorioamnionitis (placental histology)	9	1.4	9	4.8	18	2.2
9.12 No chorioamnionitis (placental histology)	8	1.3	5	2.6	13	1.6
9.13 With clinical evidence of chorioamnionitis, no examination of placenta	1	0.2	1	0.5	2	0.2
9.13 With clinical evidence of chorioamnionitis, no examination of placenta						
9.17 No clinical signs of chorioamnionitis, no examination of placenta	4	0.6	11	5.8	15	1.8
9.19 Unspecified or not known whether placenta examined	2	0.3	2	1.1	4	0.5

PSANZ PDC	Stillbirths (Fetal death)		Neonatal death		Total	
	n	%	n	%	n	%
9.20 Spontaneous preterm with intact membranes or membrane rupture < 24hrs before delivery		0.0		0.0	0	0.0
9.21 Chorioamnionitis (placental histology)	18	2.8	7	3.7	25	3.0
9.22 No chorioamnionitis (placental histology)	6	0.9	2	1.1	8	1.0
9.23 With clinical evidence of chorioamnionitis, no examination of placenta	1	0.2	6	3.2	7	0.9
9.27 No clinical signs of chorioamnionitis, no examination of placenta	3	0.5	1	0.5	4	0.5
9.29 Unspecified or not known whether placenta examined		0.0		0.0	0	0.0
9.31 Chorioamnionitis (placental histology)	1	0.2	1	0.5	2	0.2
9.32 No chorioamnionitis (placental histology)	0	0.0	2	1.1	2	0.2
9.33 With clinical evidence of chorioamnionitis, no examination of placenta	0	0.0	1	0.5	1	0.1
9.37 No clinical signs of chorioamnionitis, no examination of placenta	1	0.2	0	0.0	1	0.1
9.39 Unspecified or not known whether placenta examined	0	0.0	1	0.5	1	0.1
10. Unexplained Antepartum Death	93	14.7	0	0	93	11.3
10.1 Evidence of uteroplacental insufficiency	16	2.5	0	0	16	1.9
10.2 With chronic villitis	2	0.3	0	0	2	0.2
10.3 No placental pathology	59	9.3	0	0	59	7.2
10.4 No examination of placenta	8	1.3	0	0	8	1.0
10.8 Other specified placental pathology	5	0.8	0	0	5	0.6
10.9 Unspecified or not known whether placenta examined	3	0.5	0	0	3	0.4
11. No Obstetric Antecedent	0	0.0	9	4.8	9	1.1
11.0 No obstetric antecedent	0	0.0	4	2.1	4	0.5
11.2 Postnatally acquired infection	0	0.0	0	0.0	0	0.0
11.13 No obstetric antecedent – Sudden Infant Death Syndrome (SIDS) (SIDS Category II: Infant deaths that meet Category I except for one or more features.)	0	0.0	1	0.5	1	0.1
11.2 No obstetric antecedent – Postnatally acquired infection	0	0.0	2	1.1	2	0.2
11.9 No obstetric precedent – Unknown/undetermined	0	0.0	0	0.0	0	0.0
11.92 No obstetric antecedent – Unknown/undetermined (Other unknown/undetermined)	0	0.0	2	1.1	2	0.2
Total	633	100	189	100	822	100

Table 20a: Perinatal deaths (adjusted) in singleton and multiple births by cause (PSANZ PDC), Victoria 2014

PSANZ PDC	Singleton		Multiple		Total	
	n	%	n	%	n	%
1. Congenital abnormality	224	34.7	22	20.0	246	32.5
2. Infection	30	4.6	5	4.5	35	4.6
3. Hypertension	13	2.0	1	0.9	14	1.9
4. Antepartum haemorrhage	64	9.9	4	3.6	68	9.0
5. Maternal conditions	29	4.5	0	0.0	29	3.8
6. Specific perinatal conditions	32	5.0	24	21.8	56	7.4
7. Hypoxic peripartum death	27	4.2	3	2.7	30	4.0
8. Fetal growth restriction (FGR)	45	7.0	5	4.5	50	6.6
9. Spontaneous preterm	68	10.5	36	32.7	104	13.8
10. Unexplained antepartum death	110	17.0	10	9.1	120	15.9
11. No obstetric antecedent	4	0.6	0	0.0	4	0.5
Total	646	100.0	110	100.0	756	100.0

Table 20b: Perinatal deaths (adjusted) in singleton and multiple births by cause (PSANZ PDC), Victoria 2015

PSANZ PDC	Singleton		Multiple		Total	
	n	%	n	%	n	%
1. Congenital abnormality	263	40.8	11	15.5	274	38.3
2. Infection	33	5.1	5	7.0	38	5.3
3. Hypertension	16	2.5	0	0.0	16	2.2
4. Antepartum haemorrhage	43	6.7	4	5.6	47	6.6
5. Maternal conditions	10	1.6	0	0.0	10	1.4
6. Specific perinatal conditions	47	7.3	13	18.3	60	8.4
7. Hypoxic peripartum death	17	2.6	0	0.0	17	2.4
8. Fetal growth restriction (FGR)	46	7.1	2	2.8	48	6.7
9. Spontaneous preterm	73	11.3	30	42.3	103	14.4
10. Unexplained antepartum death	88	13.7	5	7.0	93	13.0
11. No obstetric antecedent	8	1.2	1	1.4	9	1.3
Total	644	100.0	71	100.0	715	100.0

Table 20c: Perinatal deaths (adjusted) by PSANZ PDC and Aboriginal status, Victoria 2003–2015

PSANZ PDC	ATSI			Non-Aboriginal			Total		
	Count	%	rate	Count	%	rate	Count	%	rate
1. Congenital abnormality	31	16.1	3.0	2,963	32.9	3.2	2,994	32.6	3.2
2. Infection	4	2.1	0.4	247	2.7	0.3	251	2.7	0.3
3. Hypertension	13	6.7	1.3	256	2.8	0.3	269	2.9	0.3
4. Antepartum haemorrhage	24	12.4	2.4	703	7.8	0.8	727	7.9	0.8
5. Maternal conditions	4	2.1	0.4	244	2.7	0.3	248	2.7	0.3
6. Specific perinatal conditions	13	6.7	1.3	777	8.6	0.8	790	8.6	0.8
7. Hypoxic peripartum death	4	2.1	0.4	263	2.9	0.3	267	2.9	0.3
8. Fetal growth restriction	15	7.8	1.5	591	6.6	0.6	606	6.6	0.6
9. Spontaneous preterm	54	28.0	5.3	1,507	16.7	1.6	1,561	17.0	1.7
10. Unexplained antepartum death	26	13.5	2.5	1,386	15.4	1.5	1,412	15.4	1.5
11. No obstetric antecedent	5	2.6	0.5	63	0.7	0.1	68	0.7	0.1
Total	193	100.0	18.9	9,000	100.0	9.7	9,193	100.0	9.8

This table excludes births and perinatal deaths in which Aboriginal status was unknown.

This table is based on data relating to Aboriginal status of infant (not mother), and therefore may differ from other tables based on Aboriginal status of mother.

Table 21a: Perinatal deaths as a result of terminations of pregnancy, Victoria 2014

Cause of death PSANZ PDC	Stillbirths (Fetal death)	Neonatal death	Total
	n	n	n
Termination for suspected or confirmed congenital abnormality	135	37	172
Terminations for psychosocial indications	146	1	147
Total	281	38	319

Table 21b: Perinatal deaths as a result of terminations of pregnancy, Victoria 2015

Cause of death PSANZ PDC	Stillbirths (Fetal death)	Neonatal death	Total
	n	n	n
Termination for suspected or confirmed congenital abnormality	171	31	202
Terminations for psychosocial indications	107	0	107
Total	278	31	309

Table 22a: Perinatal deaths by PSANZ PDC and gestational age, Victoria 2014

PSANZ PDC	20–27 weeks		28–31 weeks		32–36 weeks		37+ weeks		Total		Total excluding PSANZ PDC 5.1 ^a	
	n	%	n	%	n	%	n	%	n	%	n	%
1. Congenital abnormality	164	27.6	28	35.0	26	26.0	28	21.9	246	27.2	246	32.5
2. Infection	20	3.4	5	6.3	2	2.0	8	6.3	35	3.9	35	4.6
3. Hypertension	9	1.5	2	2.5	2	2.0	1	0.8	14	1.6	14	1.9
4. Antepartum haemorrhage	45	7.6	7	8.8	11	11.0	5	3.9	68	7.5	68	9.0
5. Maternal conditions (excluding terminations of pregnancy for psychosocial indications)	10	1.7	2	2.5	11	11.0	6	4.7	29	3.2	29	3.8
5.1 Maternal conditions (terminations for psychosocial indications only)	146	24.5	0	0.0	1	1.0	0	0.0	147	16.3	NA	NA
6. Specific perinatal conditions	35	5.9	8	10.0	7	7.0	6	4.7	56	6.2	56	7.4
7. Hypoxic peripartum death	3	0.5	3	3.8	5	5.0	19	14.8	30	3.3	30	4.0
8. Fetal growth restriction	24	4.0	10	12.5	8	8.0	8	6.3	50	5.5	50	6.6
9. Spontaneous preterm	102	17.1	1	1.3	1	1.0	0	0.0	104	11.5	104	13.8
10. Unexplained antepartum death	37	6.2	14	17.5	25	25.0	44	34.4	120	13.3	120	15.9
11. No obstetric antecedent	0	0.0	0	0.0	1	1.0	3	2.3	4	0.4	4	0.5
Total	595	100.0	80	100.0	100	100.0	128	100.0	903	100.0	756	100.0

a. Total excluding PSANZ PDC 5.1 (terminations of pregnancy \geq 20 weeks for psychosocial indications).

NA – not applicable

Table 22b: Perinatal deaths by PSANZ PDC and gestational age, Victoria 2015

PSANZ PDC	20–27 weeks		28–31 weeks		32–36 weeks		37+ weeks		Total		Total excluding PSANZ PDC 5.1 ^a	
	n	%	n	%	n	%	n	%	n	%	n	%
1. Congenital abnormality	204	37.0	17	26.6	32	35.6	21	18.1	274	33.3	274	38.3
2. Infection	26	4.7	1	1.6	4	4.4	7	6.0	38	4.6	38	5.3
3. Hypertension	6	1.1	6	9.4	4	4.4	0	0.0	16	1.9	16	2.2
4. Antepartum haemorrhage	25	4.5	5	7.8	8	8.9	9	7.8	47	5.7	47	6.6
5. Maternal conditions (excluding terminations of pregnancy for psychosocial indications)	5	0.9	0	0.0	2	2.2	3	2.6	10	1.2	10	1.4
5.1 Maternal conditions (terminations for psychosocial indications only)	107	19.4	0	0.0	0	0.0	0	0.0	107	13.0	NA	NA
6. Specific perinatal conditions	29	5.3	10	15.6	10	11.1	11	9.5	60	7.3	60	8.4
7. Hypoxic peripartum death	1	0.2	0	0.0	3	3.3	13	11.2	17	2.1	17	2.4
8. Fetal growth restriction	20	3.6	12	18.8	6	6.7	10	8.6	48	5.8	48	6.7
9. Spontaneous preterm	99	17.9	1	1.6	3	3.3	0	0.0	103	12.5	103	14.4
10. Unexplained antepartum death	30	5.4	12	18.8	17	18.9	34	29.3	93	11.3	93	13.0
11. No obstetric antecedent	0	0.0	0	0.0	1	1.1	8	6.9	9	1.1	9	1.3
Total	552	100.0	64	100.0	90	100.0	116	100.0	822	100.0	715	100.0

a. Total excluding PSANZ PDC 5.1 (terminations of pregnancy \geq 20 weeks for psychosocial indications).

NA – not applicable

Figure 8a: Causes of perinatal death, PSANZ PDC, Victoria 2014

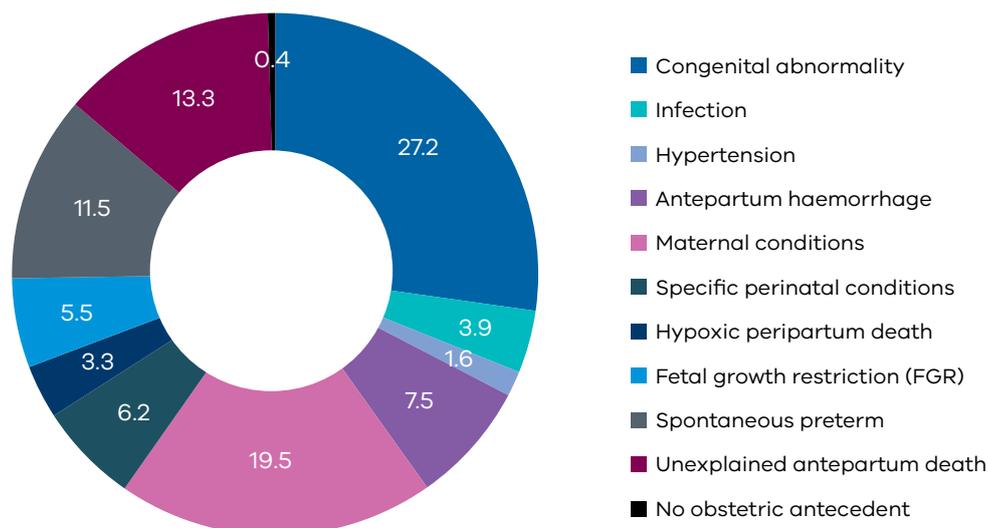


Figure 8b: Causes of perinatal death, PSANZ PDC, Victoria 2015

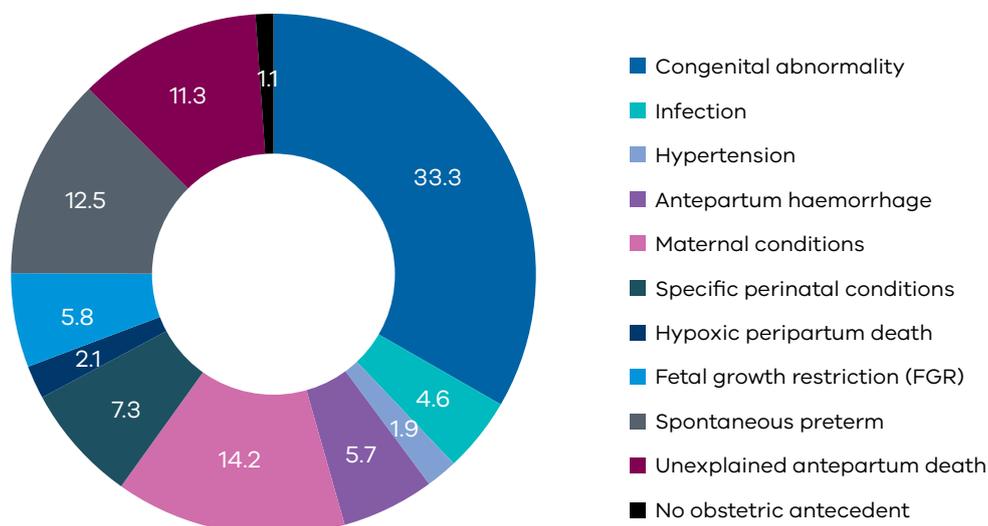


Figure 9a: Causes of perinatal death (adjusted), PSANZ PDC, Victoria 2014

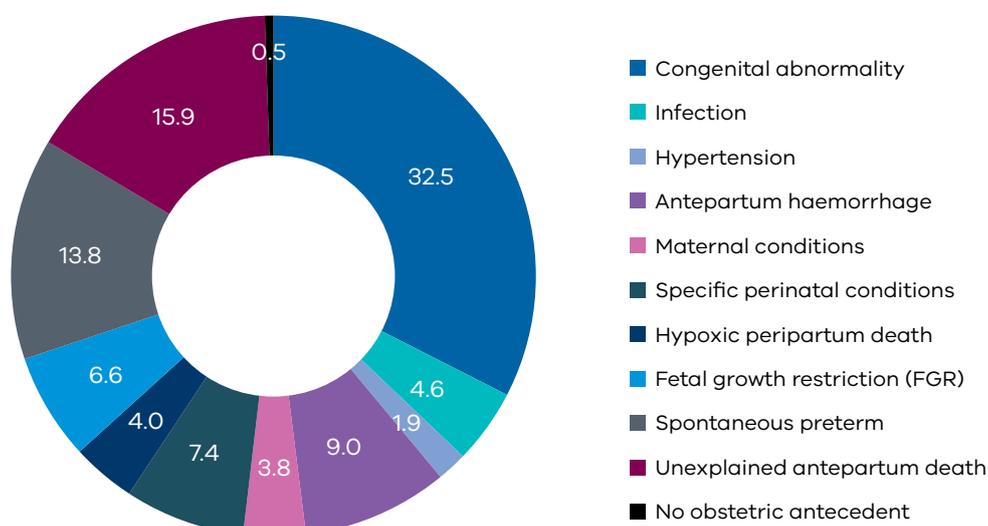
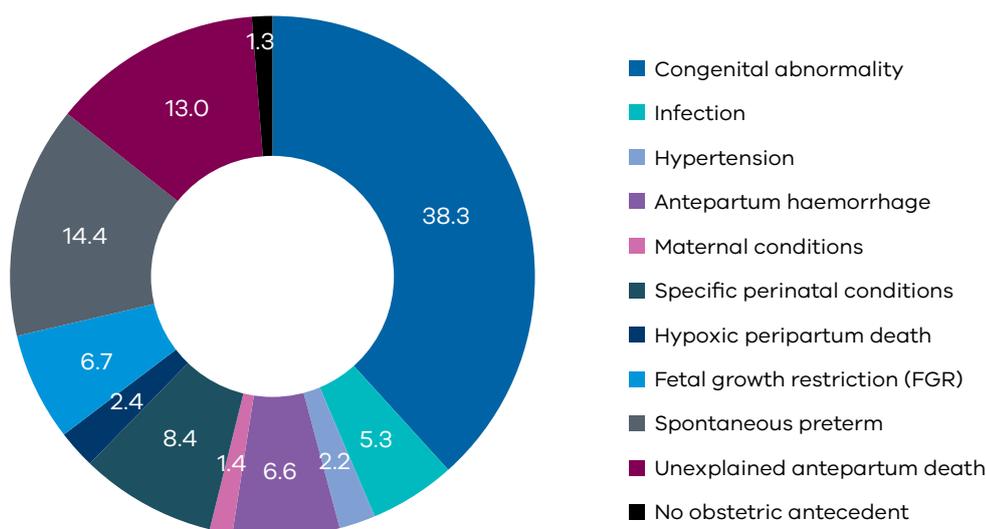


Figure 9b: Causes of perinatal death (adjusted), PSANZ PDC, Victoria 2015**Table 23a: Stillbirths by PSANZ PDC and gestational age, Victoria 2014**

PSANZ PDC	20–27 weeks		28–31 weeks		32–36 weeks		37+ weeks		Total		Total excluding PSANZ PDC 5.1 ^a	
	n	%	n	%	n	%	n	%	n	%	n	%
1. Congenital abnormality	124	27.9	21	35.0	17	20.2	8	9.5	170	25.3	170	32.3
2. Infection	11	2.5	4	6.7	2	2.4	5	6.0	22	3.3	22	4.2
3. Hypertension	7	1.6	2	3.3	2	2.4	1	1.2	12	1.8	12	2.3
4. Antepartum haemorrhage	27	6.1	5	8.3	11	13.1	4	4.8	47	7.0	47	8.9
5. Maternal conditions (excluding terminations of pregnancy for psychosocial indications)	8	1.8	0	0.0	11	13.1	4	4.8	23	3.4	23	4.4
5.1 Maternal conditions (terminations for psychosocial indications only)	145	32.7	0	0.0	1	1.2	0	0.0	146	21.7	NA	NA
6. Specific perinatal conditions	21	4.7	5	8.3	4	4.8	3	3.6	33	4.9	33	6.3
7. Hypoxic peripartum death	2	0.5	0	0.0	3	3.6	8	9.5	13	1.9	13	2.5
8. Fetal growth restriction	22	5.0	9	15.0	8	9.5	7	8.3	46	6.8	46	8.7
9. Spontaneous preterm	40	9.0	0	0.0	0	0.0	0	0.0	40	6.0	40	7.6
10. Unexplained antepartum death	37	8.3	14	23.3	25	29.8	44	52.4	120	17.9	120	22.8
Total	444	100	60	100	84	100	84	100	672	100	526	100

a. Total excluding PSANZ PDC 5.1 (terminations of pregnancy \geq 20 weeks for psychosocial indications).

NA – not applicable

Table 23b: Stillbirths by PSANZ PDC and gestational age, Victoria 2015

PSANZ PDC	20–27 weeks		28–31 weeks		32–36 weeks		37+ weeks		Total		Total excluding PSANZ PDC 5.1 ^a	
	n	%	n	%	n	%	n	%	n	%	n	%
1. Congenital abnormality	172	39.2	11	21.6	16	24.6	9	11.5	208	32.9	208	39.5
2. Infection	17	3.9	0	0.0	4	6.2	5	6.4	26	4.1	26	4.9
3. Hypertension	5	1.1	5	9.8	4	6.2	0	0.0	14	2.2	14	2.7
4. Antepartum haemorrhage	11	2.5	3	5.9	5	7.7	6	7.7	25	3.9	25	4.8
5. Maternal conditions (excluding terminations of pregnancy for psychosocial indications)	4	0.9	0	0.0	2	3.1	3	3.8	9	1.4	9	1.7
5.1 Maternal conditions (terminations for psychosocial indications only)	107	24.4	0	0.0	0	0.0	0	0.0	107	16.9	NA	NA
6. Specific perinatal conditions	19	4.3	7	13.7	9	13.8	8	10.3	43	6.8	43	8.2
7. Hypoxic peripartum death	1	0.2	0	0.0	2	3.1	3	3.8	6	0.9	6	1.1
8. Fetal growth restriction	20	4.6	12	23.5	6	9.2	10	12.8	48	7.6	48	9.1
9. Spontaneous preterm	53	12.1	1	2.0	0	0.0	0	0.0	54	8.5	54	10.3
10. Unexplained antepartum death	30	6.8	12	23.5	17	26.2	34	43.6	93	14.7	93	17.7
Total	439	100	51	100	65	100	78	100	633	100	526	100

a. Total excluding PSANZ PDC 5.1 (terminations of pregnancy \geq 20 weeks for psychosocial indications: 107 stillbirths).

NA – not applicable

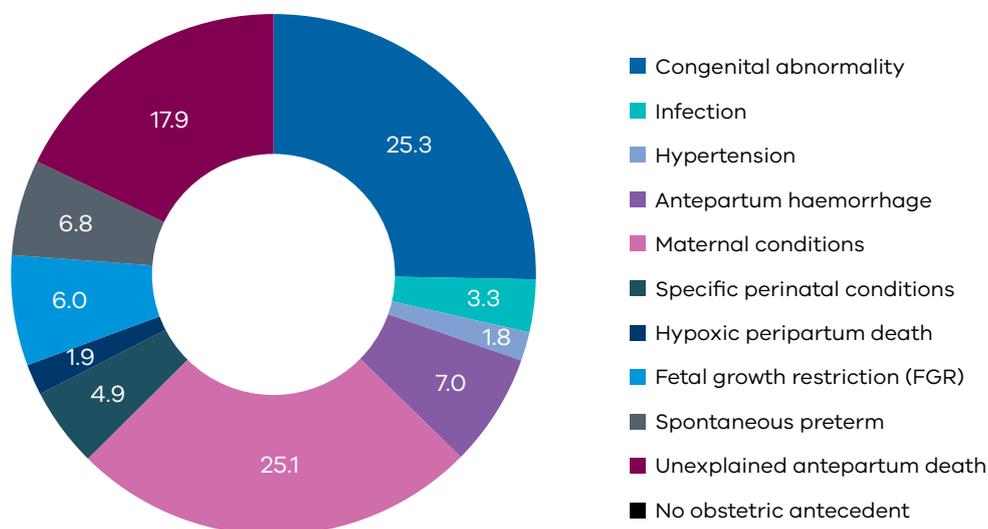
Figure 10a: Causes of stillbirth, PSANZ PDC, Victoria 2014

Figure 10b: Causes of stillbirth, PSANZ PDC, Victoria 2015

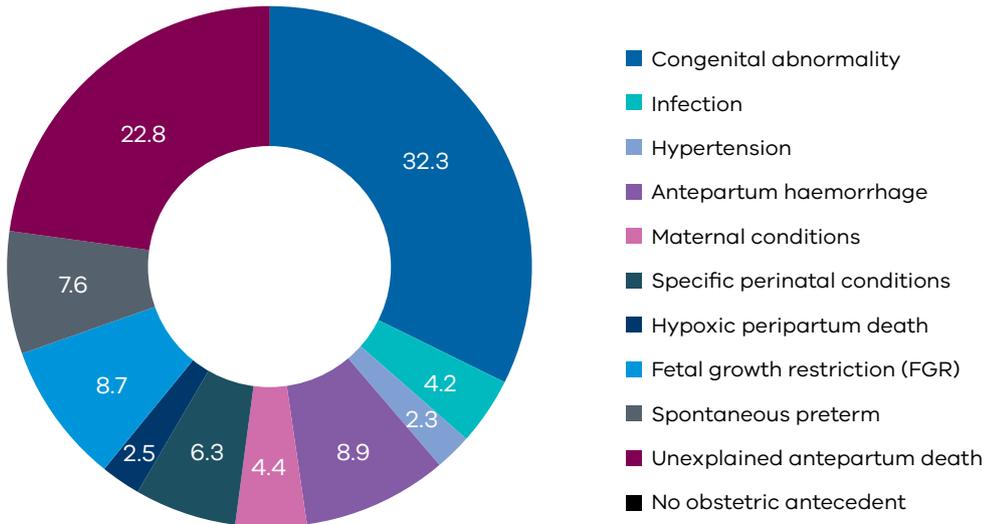


Figure 11a: Causes of stillbirth (adjusted), PSANZ PDC, Victoria 2014

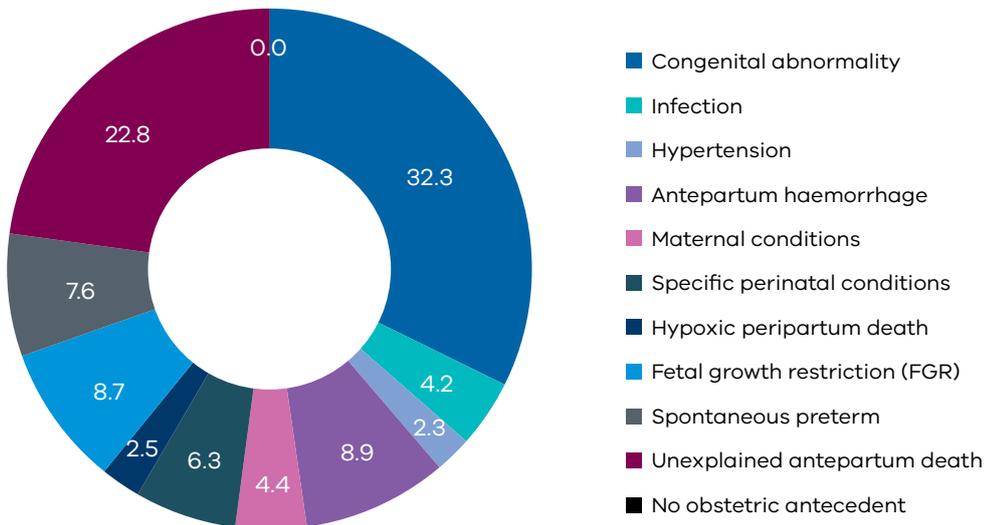


Figure 11b: Causes of stillbirth (adjusted), PSANZ PDC, Victoria 2015

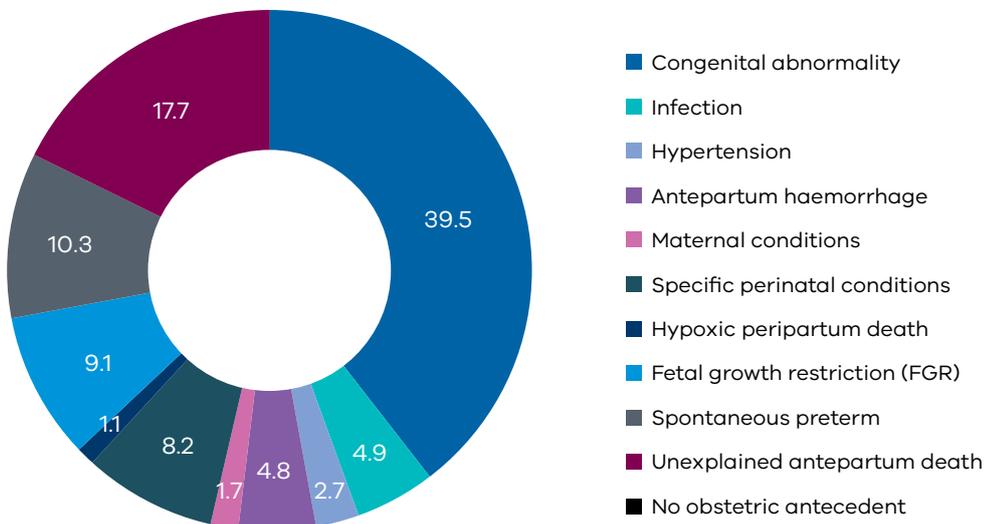


Table 24a: Neonatal deaths by PSANZ PDC and gestational age, Victoria 2014

PSANZ PDC	20–27 weeks		28–31 weeks		32–36 weeks		37+ weeks		Total	
	n	%	n	%	n	%	n	%	n	%
1. Congenital abnormality	40	26.5	7	35.0	9	56.3	20	45.5	76	32.9
2. Infection	9	6.0	1	5.0	0	0.0	3	6.8	13	5.6
3. Hypertension	2	1.3	0	0.0	0	0.0	0	0.0	2	0.9
4. Antepartum haemorrhage	18	11.9	2	10.0	0	0.0	1	2.3	21	9.1
5. Maternal conditions	3	2.0	2	10.0	0	0.0	2	4.5	7	3.0
6. Specific perinatal conditions	14	9.3	3	15.0	3	18.8	3	6.8	23	10.0
7. Hypoxic peripartum death	1	0.7	3	15.0	2	12.5	11	25.0	17	7.4
8. Fetal growth restriction	2	1.3	1	5.0	0	0.0	1	2.3	4	1.7
9. Spontaneous preterm	62	41.1	1	5.0	1	6.3	0	0.0	64	27.7
11. No obstetric antecedent	0	0.0	0	0.0	1	6.3	3	6.8	4	1.7
Total	151	100	20	100	16	100	44	100	231	100

Table 24b: Neonatal deaths by PSANZ PDC and gestational age, Victoria 2015

PSANZ PDC	20–27 weeks		28–31 weeks		32–36 weeks		37+ weeks		Total	
	n	%	n	%	n	%	n	%	n	%
1. Congenital abnormality	32	28.3	6	46.2	16	64.0	12	31.6	66	34.9
2. Infection	9	8.0	1	7.7	0	0.0	2	5.3	12	6.3
3. Hypertension	1	0.9	1	7.7	0	0.0	0	0.0	2	1.1
4. Antepartum haemorrhage	14	12.4	2	15.4	3	12.0	3	7.9	22	11.6
5. Maternal conditions	1	0.9	0	0.0	0	0.0	0	0.0	1	0.5
6. Specific perinatal conditions	10	8.8	3	23.1	1	4.0	3	7.9	17	9.0
7. Hypoxic peripartum death	0	0.0	0	0.0	1	4.0	10	26.3	11	5.8
8. Fetal growth restriction	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
9. Spontaneous preterm	46	40.7	0	0.0	3	12.0	0	0.0	49	25.9
11. No obstetric antecedent	0	0.0	0	0.0	1	4.0	8	21.1	9	4.8
Total	113	100.0	13	100.0	25	100.0	38	100.0	189	100.0

Figure 12a: Causes of neonatal deaths, PSANZ PDC, Victoria 2014

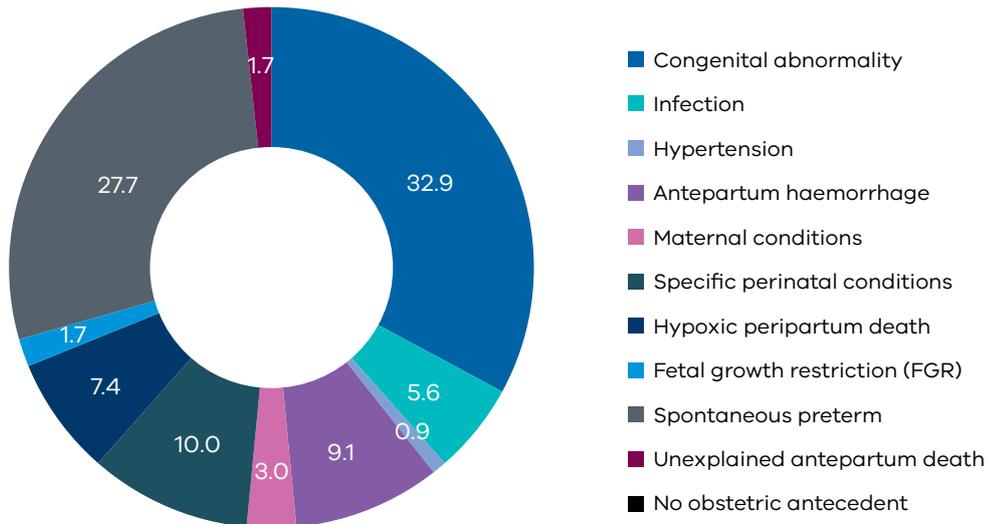


Figure 12b: Causes of neonatal deaths, PSANZ PDC, Victoria 2015

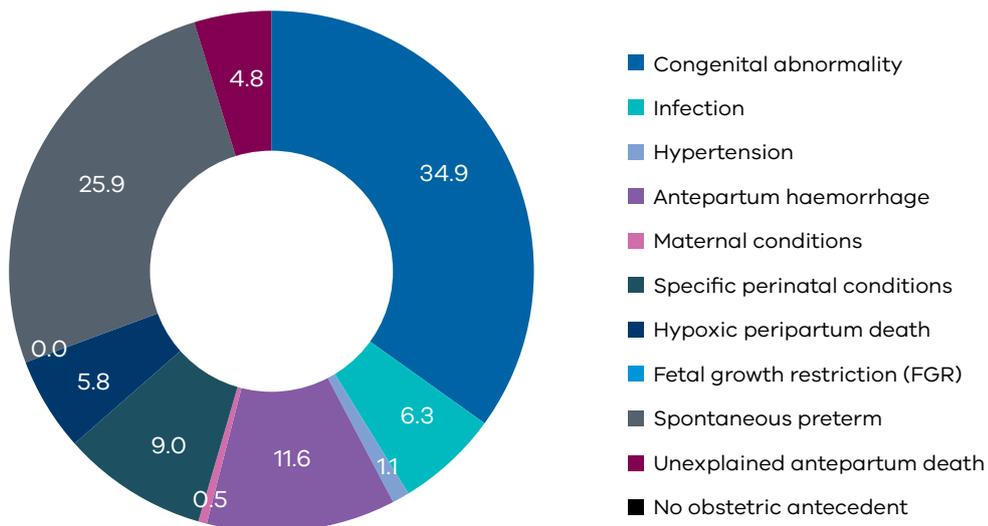


Table 25a: Neonatal deaths by PSANZ NDC and gestational age, Victoria 2014

Cause of death PSANZ NDC	20–27 weeks		28–31 weeks		32–36 weeks		37+ weeks		Total	
	n	%	n	%	n	%	n	%	n	%
1. Congenital abnormality	40	26.5	7	35.0	9	56.3	20	45.5	76	32.9
2. Extreme prematurity	89	58.9	0	0.0	0	0.0	0	0.0	89	38.5
3. Cardio-respiratory disease	11	7.3	2	10.0	2	12.5	1	2.3	16	6.9
4. Infection	4	2.6	3	15.0	1	6.3	5	11.4	13	5.6
5. Neurological	5	3.3	7	35.0	3	18.8	15	34.1	30	13.0
6. Gastrointestinal	2	1.3	0	0.0	0	0.0	0	0.0	2	0.9
7. Other	0	0.0	1	5.0	1	6.3	3	6.8	5	2.2
Total	151	100	20	100	16	100	44	100	231	100

Table 25b: Neonatal deaths by PSANZ NDC and gestational age, Victoria 2015

Cause of death PSANZ NDC	20–27 weeks		28–31 weeks		32–36 weeks		37+ weeks		Total	
	n	%	n	%	n	%	n	%	n	%
1. Congenital abnormality	32	28.3	6	46.2	16	64.0	12	31.6	66	34.9
2. Extreme prematurity	62	54.9	0	0.0	0	0.0	0	0.0	62	32.8
3. Cardio-respiratory disease	6	5.3	2	15.4	1	4.0	1	2.6	10	5.3
4. Infection	2	1.8	1	7.7	1	4.0	3	7.9	7	3.7
5. Neurological	9	8.0	3	23.1	4	16.0	17	44.7	33	17.5
6. Gastrointestinal	1	0.9	0	0.0	1	4.0	1	2.6	3	1.6
7. Other	1	0.9	1	7.7	2	8.0	4	10.5	8	4.2
Total	113	100	13	100	25	100	38	100.0	189	100

Table 25c: Neonatal deaths by PSANZ NDC, expanded categories and gestational age, Victoria 2014

PSANZ NDC	Gestational age				
	20–27 weeks	28–31 weeks	32–36 weeks	37+ weeks	Total
	n	n	n	n	n
1. Congenital abnormality	40	7	9	20	76
1 Congenital abnormality	0	1	0	0	1
1.1 Central nervous system	8	3	2	2	15
1.2 Cardiovascular system	13	1	2	8	24
1.3 Urinary Tract	3	0	0	1	4
1.5 Chromosomal	9	0	1	4	14
1.6 Metabolic	0	0	0	1	1
1.7 Multiple	2	0	1	0	3
1.81 Musculoskeletal	3	0	3	1	7
1.82 Respiratory	0	0	0	1	1
1.83 Diaphragmatic hernia	1	0	0	2	3
1.84 Haematological	0	1	0	0	1
1.85 Tumours	1	1	0	0	2

PSANZ NDC	Gestational age				
	20–27 weeks	28–31 weeks	32–36 weeks	37+ weeks	Total
	n	n	n	n	n
2. Extreme prematurity	89	0	0	0	89
2.10 Not resuscitated	85	0	0	0	85
2.20 Unsuccessful resuscitation	4	0	0	0	4
3. Cardio-respiratory disease	11	2	2	1	16
3.1 Hyaline membrane disease/Respiratory Distress Syndrome	7	0	0	0	7
3.2 Meconium aspiration syndrome	0	0	0	1	1
3.3 Primary persistent pulmonary hypertension	0	0	1	0	1
3.4 Pulmonary hypoplasia	2	1	0	0	3
3.6 Pulmonary haemorrhage	0	1	0	0	1
3.8 Other cardio-respiratory	2	0	1	0	3
4. Infection	4	3	1	5	13
4.11 Congenital bacterial	0	1	0	0	1
4.111 Group B Streptococcus	1	0	0	0	1
4.112 Bacterial – E coli	1	0	0	0	1
4.12 Acquired bacterial					
4.125 Other gram negative bacilli (other than E Coli)	0	2	0	0	2
4.127 Coagulase negative Staphylococcus	1	0	0	0	1
4.21 Congenital viral	0	0	0	1	1
4.228 Other specified viral	1	0	0	2	3
4.9 Unspecified organism	0	0	1	2	3
5. Neurological	5	7	3	15	30
5.1 Hypoxic ischaemic encephalopathy/perinatal asphyxia	1	3	2	14	20
5.2 Intracranial haemorrhage					
5.21 Intraventricular haemorrhage	4	2	1	0	7
5.23 Subarachnoid haemorrhage	0	0	0	1	1
5.28 Other intracranial haemorrhage	0	1	0	0	1
5.8 Other	0	1	0	0	1
6. Gastrointestinal	2	0	0	0	2
6.1 Necrotising enterocolitis	1	0	0	0	1
6.8 Other	1	0	0	0	1
7. Other	0	1	1	3	5
7.2 Multisystem failure	0	0	0	1	1
7.28 Other specified multisystem failure	0	1	0	0	1
7.92 Other – Unknown/undetermined (Other unknown/undetermined)	0	0	1	2	3
Total	151	20	16	44	231

Table 25d: Neonatal deaths by PSANZ NDC, expanded categories and gestational age, Victoria 2015

PSANZ NDC	Gestational age				
	20–27 weeks	28–31 weeks	32–36 weeks	37+ weeks	Total
	n	n	n	n	n
1. Congenital abnormality	32	6	16	12	66
1.1 Central nervous system	8	1	6	5	20
1.2 Cardiovascular system	5	1	3	3	12
1.3 Urinary Tract	3	0	2	0	5
1.4 Gastrointestinal system	1	0	0	0	1
1.5 Chromosomal	6	0	3	2	11
1.6 Metabolic	0	0	0	0	0
1.7 Multiple	5	2	1	1	9
1.81 Musculoskeletal	3	1	1	0	5
1.82 Respiratory	0	0	0	0	0
1.83 Diaphragmatic hernia	0	0	0	0	0
1.84 Haematological	0	0	0	1	1
1.85 Tumours	0	1	0	0	1
1.88 Other specified congenital abnormality	1	0	0	0	1
2. Extreme prematurity	62	0	0	0	62
2.10 Not resuscitated	59	0	0	0	59
2.20 Unsuccessful resuscitation	3	0	0	0	3
3. Cardio-respiratory disease	6	2	1	1	10
3.1 Hyaline membrane disease/Respiratory Distress Syndrome	4	0	0	0	4
3.2 Meconium aspiration syndrome	0	0	0	0	0
3.3 Primary persistent pulmonary hypertension	0	0	0	1	1
3.4 Pulmonary hypoplasia	0	1	0	0	1
3.5 Chronic neonatal lung disease	1	0	0	0	1
3.6 Pulmonary haemorrhage	0	0	0	0	0
3.7 Pneumothorax	0	0	1	0	1
3.8 Other cardio-respiratory	1	1	0	0	2
4. Infection	2	1	1	3	7
4.11 Congenital bacterial					0
4.111 Group B Streptococcus	0	0	0	1	1
4.118 Other bacterial	1	0	0	0	1
4.12 Acquired bacterial					
4.121 Acquired bacterial – Group B Streptococcus	0	0	0	1	1
4.122 Acquired Bacterial – E coli	1	0	0	0	1
4.129 Unspecified bacterial	0	0	1	0	1
4.21 Congenital viral					
4.218 Other specified viral	0	1	0	0	1
4.22 Acquired viral					
4.223 Herpes Simplex Virus	0	0	0	1	1

PSANZ NDC	Gestational age				
	20–27 weeks	28–31 weeks	32–36 weeks	37+ weeks	Total
	n	n	n	n	n
5. Neurological	9	3	4	17	33
5.1 Hypoxic ischaemic encephalopathy/perinatal asphyxia	2	1	3	14	20
5.2 Intracranial haemorrhage					
5.21 Intraventricular haemorrhage	6	2	0	0	8
5.22 Subgaleal haemorrhage	0	0	0	2	2
5.28 Other intracranial haemorrhage	1	0	0	1	2
5.8 Other	0	0	1	0	1
6. Gastrointestinal	1	0	1	1	3
6.1 Necrotising enterocolitis	1	0	1	0	2
6.8 Other	0	0	0	1	1
7. Other	1	1	2	4	8
7.13 SIDS Category II Infant deaths that meet category I except for one or more features	0	0	1	0	1
7.210 Multisystem failure secondary to intrauterine growth restriction	1	0	0	0	1
7.310 Trauma (accidental)	0	0	1	1	2
7.920 Other – unknown/undetermined	0	1	0	3	4
Total	113	13	25	38	189

Table 26: Trends in maternal and infant characteristics relating to perinatal deaths (PND), Victoria 2007 to 2015 (%)

	Perinatal deaths not relating to termination of pregnancy for CA or MPI														Termination of pregnancy for suspected or confirmed CA														Termination of pregnancy for MPI													
	2007				2008				2009				2010				2011				2012				2013				2014				2015									
	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%	n =	%										
Maternal age																																										
<20 years	5.8	4.9	6.1	5.1	5.6	2.8	6.6	4.3	3.3	2.2	2.0	2.0	2.0	2.3	2.6	2.0	0.6	0.6	1.0	38.4	36.5	26.6	28.8	31.7	25.8	21.8	18.4	16.8														
20–24 years	13.3	14.4	13.8	13.3	12.2	12.4	12.3	11.0	13.1	12.7	13.3	7.6	12.0	8.2	9.1	5.6	9.3	7.4	29.3	30.9	32.7	31.4	25.7	28.0	31.8	32.7	41.1															
25–29 years	25.3	25.8	24.2	25.7	25.3	24.5	25.5	23.6	25.7	25.4	32.0	21.9	26.9	27.7	26.8	22.9	23.8	23.8	15.2	12.4	19.6	19.4	21.9	17.4	14.5	19.7	15.0															
30–34 years	28.3	14.4	24.1	28.3	28.9	32.1	26.9	33.7	31.4	26.0	26.0	42.3	31.4	30.3	33.3	37.4	36.6	39.6	5.5	9.0	9.3	11.0	12.0	13.6	16.2	15.0	15.0															
35–39 years	21.9	25.8	23.9	19.8	22.2	20.8	22.4	20.9	21.8	28.7	21.3	23.5	21.7	25.6	20.7	24.6	19.8	24.3	6.1	4.5	7.5	6.3	4.4	8.3	11.7	8.2	8.4															
≥40 years	5.3	6.7	7.9	7.1	5.5	7.4	6.4	5.5	4.1	5.0	5.3	2.0	5.1	5.6	8.1	8.9	9.3	4.0	2.4	3.4	4.2	2.1	4.3	6.0	2.8	6.1	3.7															
Unknown	0.0	7.9	0.0	0.7	0.4	0.0	0.0	1	1.0	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.6	0.0	3.0	3.4	0.0	1.0	0.0	0.8	1.1	0.0	0.0															
Place of residence																																										
Victoria	97.5	97.7	95.3	98.2	96.5	96.7	96.1	96.4	97.1	94.5	95.3	87.8	92.0	90.8	96.0	98.3	99.4	95.5	35.4	37.1	46.3	48.7	45.9	48.5	43.6	46.3	60.7															
Interstate	2.1	2.1	4.7	1.8	3.5	3.2	3.9	3.6	2.5	4.4	3.3	12.2	8.0	9.2	4.0	1.7	0.6	4.0	51.8	49.4	53.7	48.2	45.9	50.0	49.2	46.3	36.4															
Overseas	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.5	10.4	11.2	0.0	3.1	8.2	1.5	7.3	7.5	2.8															
Unknown	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
Gestation																																										
20–22 weeks	26.2	27.2	23.6	26.5	24.4	28.2	26.4	28.9	31.4	76.2	67.3	61.7	54.3	63.6	56.1	61.5	55.8	61.9	48.8	48.3	51.4	51.8	51.9	59.8	72.6	59.9	72.9															
23–27 weeks	23.7	22.5	25.3	23.9	27.8	22.1	28.4	21.6	21.6	21.0	27.3	25.5	30.3	26.2	31.8	31.3	33.7	31.2	49.4	48.9	43.5	44.5	42.1	40.2	27.4	39.5	27.1															
≥28 weeks	50.1	50.1	50.9	49.6	47.8	49.7	45.2	49.5	49.5	2.2	5.3	3.9	15.4	10.3	12.1	7.3	18.0	6.9	1.2	1.1	5.1	3.7	6.0	0.0	0.0	0.7	0.0															
Unknown	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
Infant sex																																										
Male	49.2	53.1	54.4	51.7	58.5	47.1	51.8	46.9	52.2	51.0	52.0	49.5	54.3	55.9	52.0	56.4	48.8	52.0	43.0	53.0	45.6	43.5	41.0	31.8	33.5	43.5	40.2															
Female	49.0	45.7	43.2	46.0	39.1	50.3	46.9	50.5	45.8	46.0	47.0	46.3	43.4	41.5	46.5	41.3	45.9	46.5	51.0	38.0	41.9	43.5	44.8	44.8	34.8	36.3	35.4	44.9														
Indeterminate	0.0	0.0	1.9	2.3	2.2	2.6	1.3	2.1	1.9	2.0	1.0	1.0	2.3	2.6	1.0	2.3	4.7	1.5	0.0	0.0	1.4	8.4	10.9	28.8	28.5	21.1	15.0															
Unknown	1.8	1.2	0.5	0.0	0.2	0.0	0.0	0.5	0.0	1.0	0.0	3.2	0.0	0.0	0.5	0.0	0.6	0.0	6.0	9.0	11.2	4.7	3.3	4.5	1.7	0.0	0.0															

Table 27a: Time of fetal death in stillbirths (by gestational age), Victoria 2014

Gestation (weeks)	Prior to labour		During labour		Total	
	n	%	n	%	n	%
20–21	47	14.5	30	45.5	77	19.7
22–23	38	11.7	12	18.2	50	12.8
24–25	28	8.6	6	9.1	34	8.7
26–27	20	6.2	1	1.5	21	5.4
28–31	48	14.8	1	1.5	49	12.5
32–36	75	23.1	3	4.5	78	19.9
37+	69	21.2	13	19.7	82	21.0
Total	325	100.0	66	100.0	391	100.0

Terminations of pregnancy for suspected or confirmed congenital abnormality and maternal psychosocial indications have been excluded from this table.

Time of fetal death data is provided by the VPDC. This is a compulsory field on the birth form so there are no missing or unknown cases.

Table 27b: Time of fetal death in stillbirths (by gestational age), Victoria 2015

Gestation (weeks)	Prior to labour		During labour		Total	
	n	%	n	%	n	%
20–21	55	19.2	25	36.8	80	22.5
22–23	30	10.5	22	32.4	52	14.6
24–25	15	5.2	4	5.9	19	5.4
26–27	23	8.0	1	1.5	24	6.8
28–31	39	13.6	4	5.9	43	12.1
32–36	58	20.2	2	2.9	60	16.9
37+	67	23.3	10	14.7	77	21.7
Total	287	100.0	68	100.0	355	100.0

Terminations of pregnancy for suspected or confirmed congenital abnormality and maternal psychosocial indications have been excluded from this table.

Time of fetal death data is provided by the VPDC. This is a compulsory field on the birth form so there are no missing or unknown cases.

Table 28a: Age at time of death of neonates, Victoria 2014

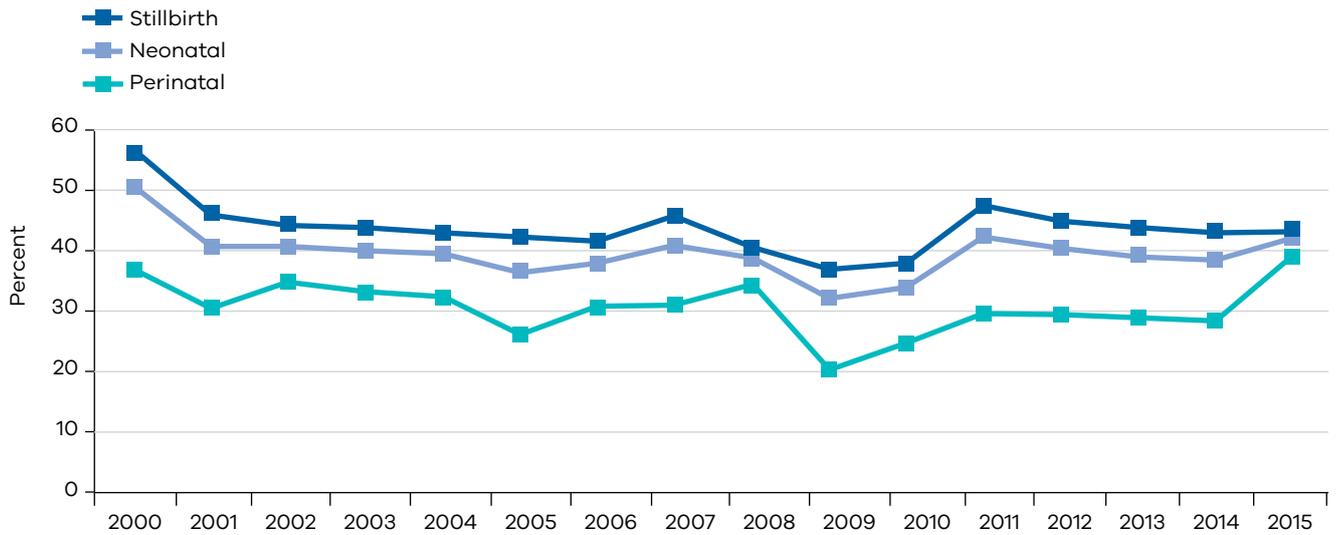
Gestation (weeks)	Early neonatal death 0–6 days	Late neonatal death 7–27 days	Total
20–21	39	0	39
22–23	42	0	42
24–25	17	6	23
26–27	6	3	9
28–31	12	8	20
32–36	11	5	16
37+	27	17	44
Total	154	39	193
% of Total	79.8	20.2	100

Neonatal deaths that were a result of termination of pregnancy for maternal psychosocial indications or suspected or confirmed congenital abnormality are excluded from this table.

Table 28b: Age at time of death of neonates, Victoria 2015

Gestation (weeks)	Early neonatal death 0–6 days	Late neonatal death 7–27days	Total
20–21	30	0	30
22–23	29	1	30
24–25	11	5	16
26–27	4	2	6
28–31	10	3	13
32–36	15	10	25
37+	28	10	38
Total	127	31	158
% of Total	80.4	19.6	100.0

Neonatal deaths that were a result of termination of pregnancy for maternal psychosocial indications or suspected or confirmed congenital abnormality are excluded from this table.

Figure 13: Perinatal autopsy rates (adjusted), Victoria 2000–2015**Table 29: Adjusted perinatal autopsy rates, Victoria 2000–2015**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Stillbirth (%)	56.6	45.9	44.2	43.8	42.9	42.2	41.6	45.7	40.5	36.9	37.9	47.5	44.8	43.8	42.9	43.2
Neonatal (%)	36.8	30.4	34.8	33.3	32.4	26.1	30.8	31.0	34.4	20.3	24.7	29.6	29.5	28.9	28.3	39.2
Perinatal (%)	50.5	40.6	40.7	40.0	39.4	36.4	37.9	40.9	38.7	32.1	33.9	42.2	40.4	39.0	38.5	42.1

Table 30a: Placental pathology, Victoria 2014

Placental pathology available	n	%
Yes	526	69.6
No	128	16.9
Missing/unknown	102	13.5
Total	756	100.0

Table 30b: Placental pathology, Victoria 2015

Placental pathology available	n	%
Yes	482	67.4
No	124	17.3
Missing/Unknown	109	15.2
Total	715	100.0

Table 31: Contributing factors in perinatal deaths (birthweight \geq 500 g), Victoria 2012–2015

Suspected Contributing factor	Count of contributing factor identified				Total perinatal deaths	% of Total
	Stillbirths	% of stillbirth factors identified	Neonates	% of neonatal death factors identified		
Obstetric factors						
Antenatal care:	49	26.9	14	9.9	63	19.5
Delay or lack of consultation in high-risk pregnancy	12	6.6	5	3.5	17	5.3
Inadequate care of diabetic mother	18	9.9	0	0	18	5.6
Insufficient antenatal care	18	9.9	8	5.7	26	8
Cervical incompetence	1	0.5	0	0	1	0.3
No clinical evidence apparent	0	0	1	0.7	1	0.3
Inadequate management of:	24	13.2	3	2.1	27	8.4
Hypertension/PET/eclampsia	1	0.5	0	0	1	0.3
Multiple pregnancy	1	0.5	0	0	1	0.3
Growth-restricted fetus	15	8.2	2	1.4	17	5.3
Macrosomia	2	1.1	0	0	2	0.6
Inadequate management of Rh immunised mother	1	0.5	0	0	1	0.3
Prolonged pregnancy	1	0.5	0	0	1	0.3
Premature rupture of membranes	2	1.1	1	0.7	3	0.9
Cervical incompetence	1	0.5	0	0	1	0.3
Inadequate antenatal monitoring:	25	13.7	11	7.8	36	11.1
Clinical need for test apparent	8	4.4	3	2.1	11	3.4
Misinterpretation of or undue reliance on tests	17	9.3	8	5.7	25	7.7
Failure of transfer of patient						
PRM < 34 weeks	0	0	0	0	0	0
PET < 34 weeks	0	0	0	0	0	0
Factors relating to the pregnant woman, her family and her social situation	49	26.9	18	12.8	67	20.7
Inappropriate maternal drugs	5	2.7	7	5	12	3.7
Failure/delay in reporting decreased movements	13	7.1	1	0.7	14	4.3
Family neglect or ignorance	25	13.7	8	5.7	33	10.2
Maternal smoking	6	3.3	2	1.4	8	2.5
Intrapartum care:	29	15.9	50	35.5	79	24.5
Caesarean section too late	6	3.3	9	6.4	15	4.6
Failure to perform caesarean section	0	0	3	2.1	3	0.9
Failure to expedite delivery	13	7.1	16	11.3	29	9
Inadequate intrapartum monitoring	8	4.4	16	11.3	24	7.4
Surgical induction too late	1	0.5	2	1.4	3	0.9
Unsuitable hospital for delivery	0	0	3	2.1	3	0.9
Forceps delivery	1	0.5	1	0.7	2	0.6

Suspected Contributing factor	Count of contributing factor identified				Total perinatal deaths	% of Total
	Stillbirths	% of stillbirth factors identified	Neonates	% of neonatal death factors identified		
Inadequate intrapartum management of:	6	3.3	10	7.1	16	5
Sepsis	1	0.5	1	0.7	2	0.6
Breech/other malpresentation	0	0	1	0.7	1	0.3
Obstructed labour	0	0	3	2.1	3	0.9
Fetal distress	1	0.5	2	1.4	3	0.9
Other maternal factor (includes poor compliance)	4	2.2	1	0.7	5	1.5
Haemorrhage	0	0	2	1.4	2	0.6
Paediatric factors^a:						
Delay in recognition/treatment of:			23	16.3	23	7.1
Delay or lack of consultation			9	6.4	9	2.8
Delay/difficulties/failure to transfer infant			4	2.8	4	1.2
Family neglect or ignorance			5	3.5	5	1.5
Malformation			2	1.4	2	0.6
Sepsis			3	2.1	3	0.9
Inadequate:			9	6.4	9	2.8
Paediatric management			4	2.8	4	1.2
Resuscitation			4	2.8	4	1.2
Nursery care			1	0.7	1	0.3
Inadequate management of:			3	2.1	3	0.9
Haemorrhage			3	2.1	3	0.9
Total number of preventable factors identified	182	100	141	100	323	100
Total number of cases	109		59		168	

a. There are no paediatric factors in stillbirths.

Definitions, methods and measures

Congenital anomaly/congenital abnormality

A congenital anomaly is any anomaly of prenatal origin, arising from conception or occurring before the end of pregnancy.

This includes structural, functional, genetic, chromosomal and biochemical anomalies.

PSANZ uses the wording 'congenital abnormality', and where PSANZ codes are used in this report, 'congenital abnormality' is used.

CCOPMM uses the wording 'congenital anomaly' in other areas of this report.

Perinatal death

Perinatal deaths refer to stillbirths and live births with only brief survival and are grouped on assumption that similar factors are associated with these losses.

CCOPMM defines perinatal death to include stillbirth and neonatal deaths within 28 days of birth of infants of gestation ≥ 20 weeks gestation or if gestation is unknown, of birthweight ≥ 400 g.

For national statistics, CCOPMM also reports on perinatal deaths of infants with a birthweight of ≥ 500 g or, if the birthweight is unknown, infants of ≥ 22 weeks gestation.

This definition has certain advantages because it excludes from the calculation those mostly pre-viable live births of < 500 g and also the majority of cases where the pregnancy was terminated for fetal or maternal indications.

For international comparison as recommended by WHO, only fetuses and infants of at least 1,000 g birthweight, or where birthweight is unavailable, the corresponding gestational age (28 weeks) or body length (35 cm crown-heel) are included in the perinatal mortality ratio.