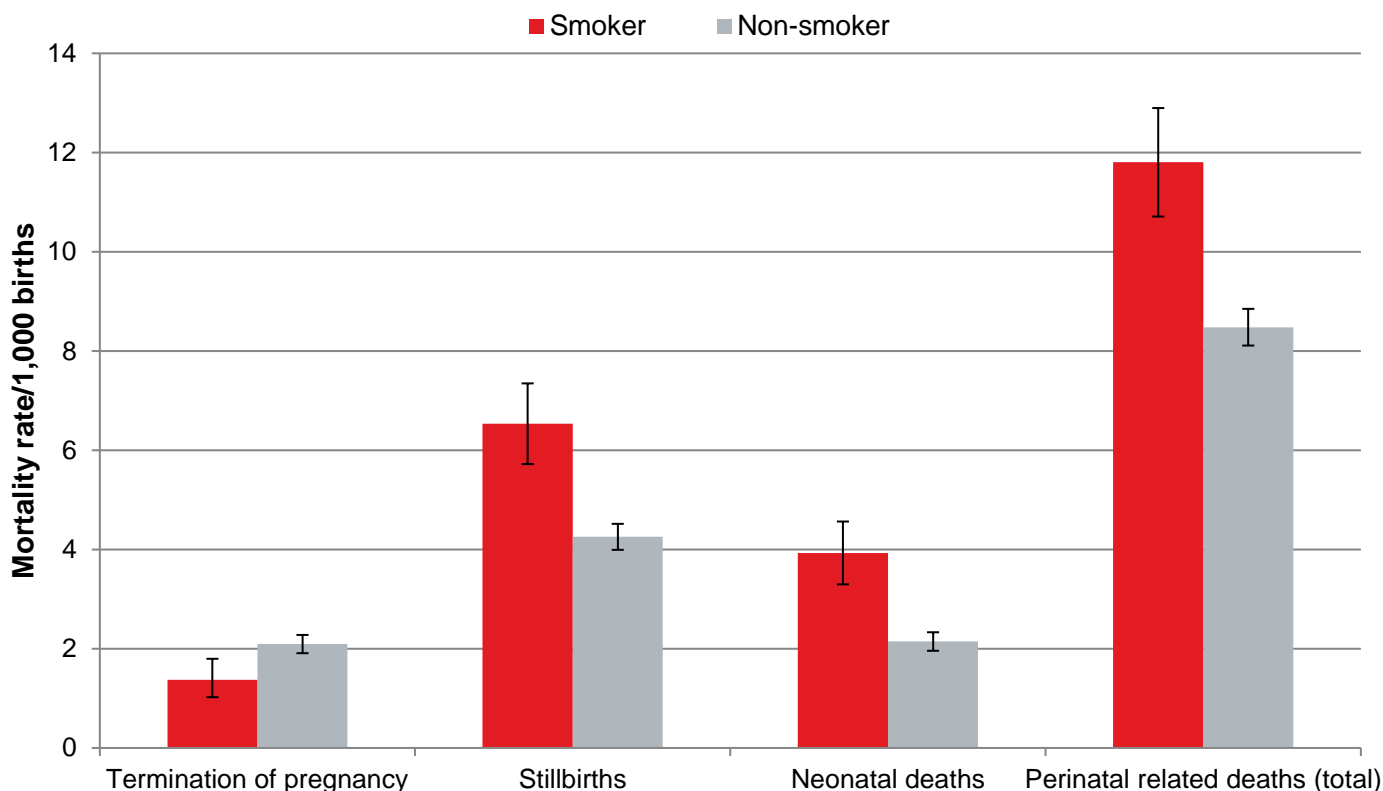


Maternal smoking

Smoking is a significant risk to health outcomes for babies, and the literature provides evidence of improved outcomes after pregnant mothers stop smoking.³⁵ Data on smoking in pregnancy come from MAT and are based on LMC registration data; specifically, the smoking status of the woman at first LMC registration.³⁶

Our data showed mortality rates were statistically significantly higher in babies of mothers who smoked, compared with those who did not smoke, for all types of death, except for termination of pregnancy (Figure 3.17 and Table 3.23).

Figure 3.17: Perinatal related mortality rates (per 1,000 births, with 95% CIs) by smoking at registration with maternity care* 2014–2018



* All data limited to mothers who were registered for care with an LMC (a midwife, obstetrician or GP) claiming from the Section 88 Primary Maternity Services Notice.

Sources: Numerator: PMMRC's perinatal data extract where matched to MAT data, 2014–2018; Denominator: MAT births 2014–2018.

³⁵ McCowan L, Dekker GA, Chan E, et al. 2009. Spontaneous preterm birth and small for gestational age infants in women who stop smoking early in pregnancy: prospective cohort study. *BMJ* 338: b1081. doi: [10.1136/bmj.b1081](https://doi.org/10.1136/bmj.b1081) (accessed 15 August 2019).

³⁶ National Health Board Business Unit. 2011. *National Maternity Collection Data Mart Data Dictionary*. URL: <https://www.health.govt.nz/system/files/documents/publications/mat-dict-v1-0.pdf> (accessed 28 November 2020), p 174.

Table 3.23: Perinatal related mortality rates (per 1,000 births) by smoking at registration with maternity care* 2014–2018

Maternal smoking at registration	Total births		Fetal deaths						Neonatal deaths			Perinatal related deaths (total)		
			Termination of pregnancy			Stillbirths								
	N=275,887		n=550			n=1,260			n=655			n=2,465		
	N	%	n	%	Rate	n	%	Rate	n	%	Rate	n	%	Rate
Smoker	37,952	13.8	52	9.5	1.37	248	19.7	6.53	148	22.6	3.93	448	18.2	11.80
Non-smoker	237,849	86.2	498	90.5	2.09	1,012	80.3	4.25	507	77.4	2.15	2,017	81.8	8.48
Unknown	86	0.0	-	-	-	-	-	-	-	-	-	-	-	-
Data not supplied to MAT			15			14			<3			30		

* All data limited to mothers who were registered for care with an LMC (a midwife, obstetrician or GP) claiming from the Section 88 Primary Maternity Services Notice.

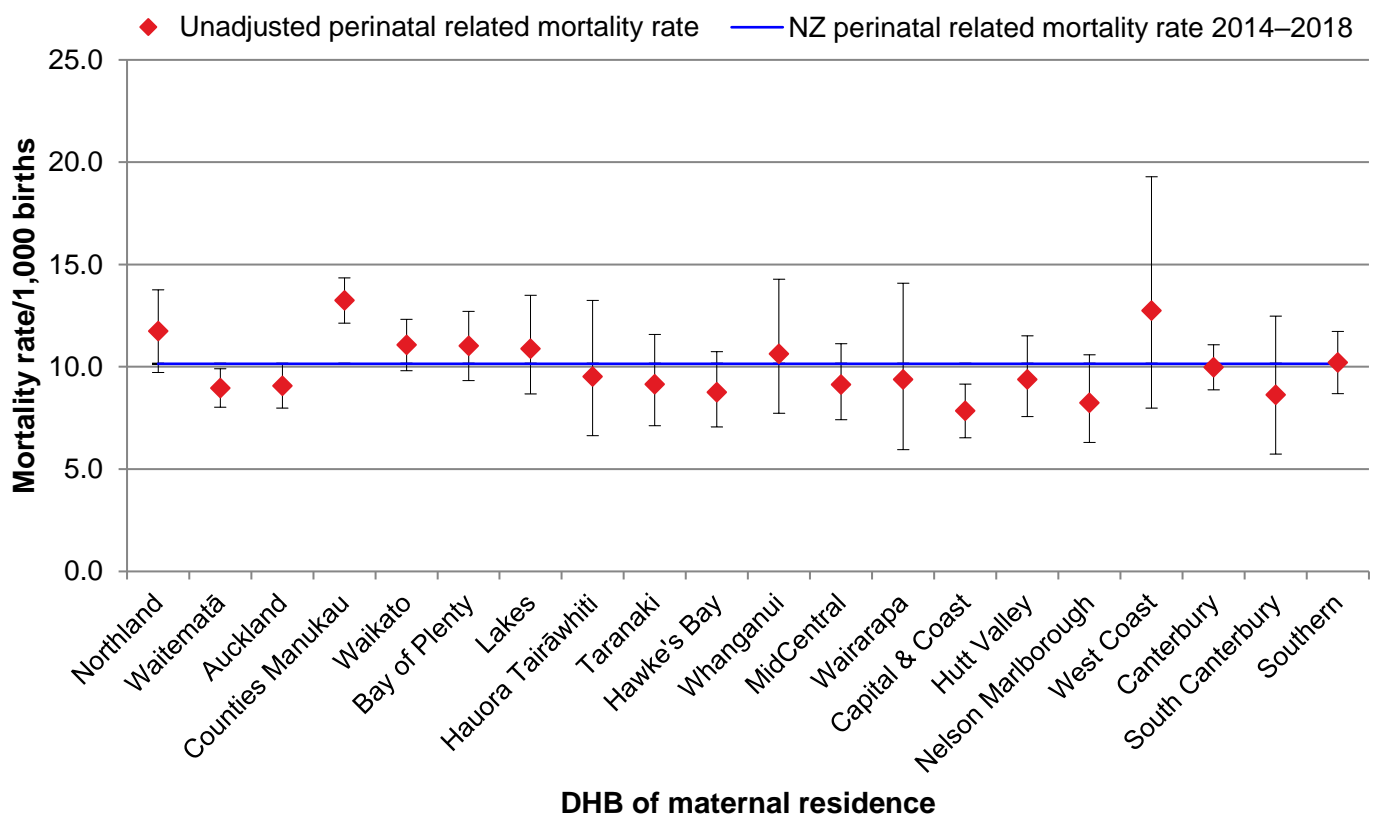
Sources: Numerator: PMMRC’s perinatal data extract where matched to MAT data, 2014–2018; Denominator: MAT births 2014–2018.

DHB of residence

Mortality rates by DHB may vary for a number of reasons. Influences on mortality rates include underlying population characteristics, geographic isolation, resourcing, delivery of care and other factors. Despite this, DHBs are charged with meeting the needs of the population they serve. Furthermore, DHBs that have a mortality rate similar to the national rate may still have groups within their region who do not experience the same level of care and outcomes as others, suggesting that an assessment of any subgroups that are experiencing worse outcomes within each DHB could be beneficial.

Perinatal related mortality rates varied by DHB of residence. The rates in Waitematā and Capital & Coast DHBs were statistically significantly lower than the national rate of 10.15 per 1,000 births. Conversely, the rates in Counties Manukau DHB were statistically significantly higher than the national rate (Figure 3.18 and Table 3.24).

Figure 3.18: Unadjusted perinatal related mortality rates (per 1,000 births, with 95% CIs) by DHB of maternal residence compared with New Zealand perinatal related mortality 2014–2018



Sources: Numerator: PMMRC’s perinatal data extract 2014–2018; Denominator: MAT births 2014–2018.