

Neonatal death

For babies aged 20–27 weeks' gestation, extreme prematurity was the leading cause of neonatal death during the period 2007–2018.

For babies aged 28 weeks' gestation and over, congenital anomalies were the leading cause of neonatal death, followed by neurological conditions. For this gestational group, neonatal deaths from neurological conditions decreased by a statistically significant rate over the study period 2007–2018 (data not shown).

Table 3.7 presents the causes of neonatal death for the period 2009–2018.

Table 3.7: Neonatal death classification (PSANZ-NDC) specific neonatal death rates (per 1,000 live births) by year 2009–2018

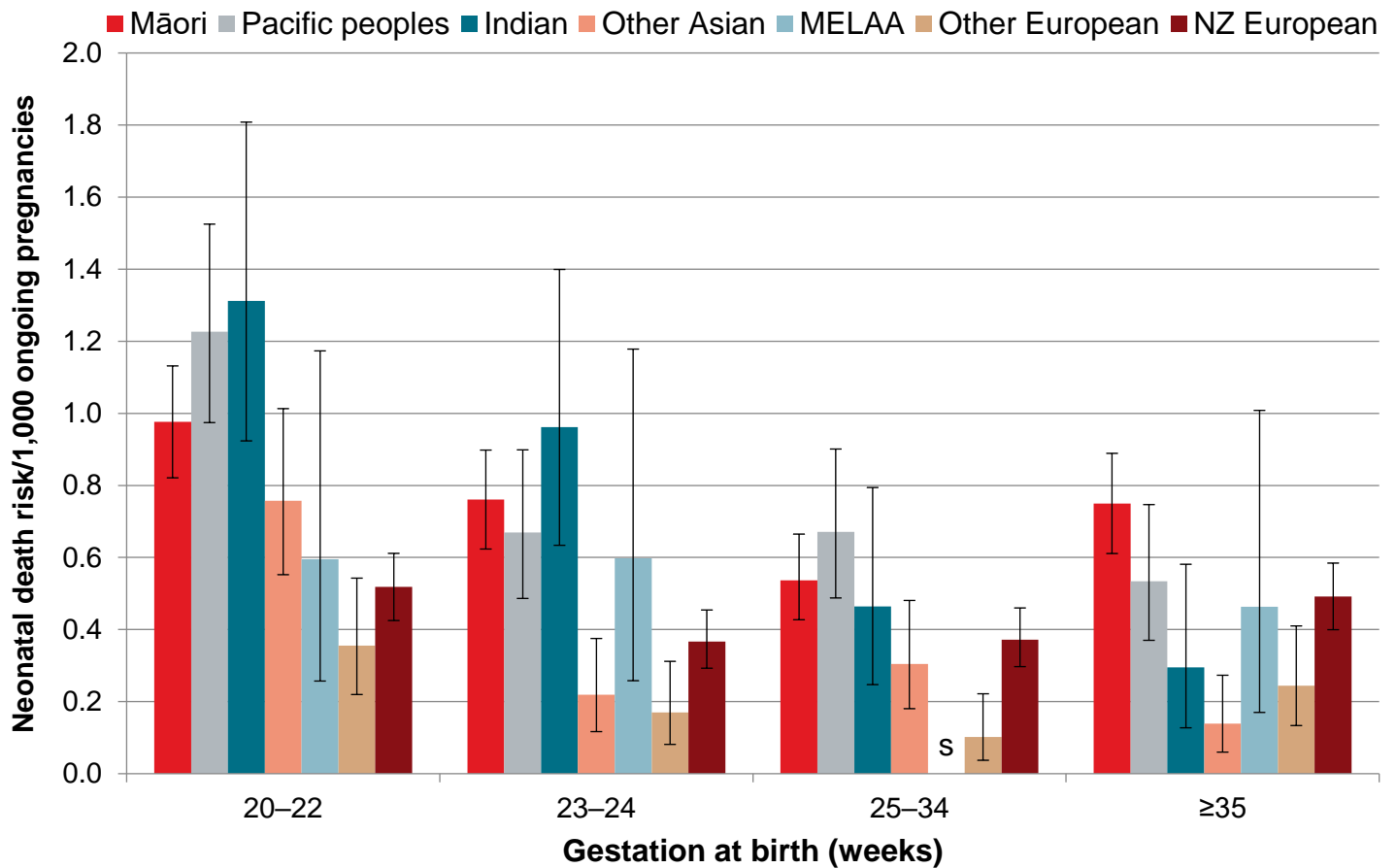
Neonatal death classification (PSANZ-NDC)	2009		2010		2011		2012		2013		2014		2015		2016		2017		2018	
	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate
Gestation <28 weeks	N=286		N=291		N=242		N=256		N=257		N=274		N=255		N=251		N=282		N=238	
Congenital anomaly	<3	s	-	-	<3	s	<3	s	<3	s	<3	s	3	11.76	<3	s	4	14.18	<3	s
Extreme prematurity	57	199.30	84	288.66	54	223.14	67	261.72	63	245.14	69	251.82	51	200.00	55	219.12	70	248.23	63	264.71
Cardio-respiratory disorders	11	38.46	16	54.98	7	28.93	10	39.06	5	19.46	12	43.80	10	39.22	6	23.90	9	31.91	10	42.02
Infection	5	17.48	7	24.05	7	28.93	10	39.06	5	19.46	7	25.55	<3	s	4	15.94	8	28.37	7	29.41
Neurological	11	38.46	<3	s	8	33.06	6	23.44	8	31.13	12	43.80	11	43.14	8	31.87	8	28.37	3	12.61
Gastrointestinal	5	17.48	4	13.75	<3	s	<3	s	<3	s	<3	s	<3	s	3	11.95	4	14.18	6	25.21
Other	3	10.49	-	-	-	-	<3	s	<3	s	<3	s	4	15.69	<3	s	<3	s	-	-
Gestation ≥28 weeks	N=63,787		N=64,109		N=61,997		N=61,625		N=59,106		N=58,945		N=58,748		N=59,489		N=59,269		N=57,196	
Congenital anomaly	41	0.64	46	0.72	48	0.77	36	0.58	31	0.52	43	0.73	42	0.71	33	0.55	28	0.47	34	0.59
Extreme prematurity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cardio-respiratory disorders	-	-	<3	s	4	0.06	4	0.06	<3	s	4	0.07	6	0.10	5	0.08	7	0.12	4	0.07
Infection	7	0.11	12	0.19	8	0.13	7	0.11	7	0.12	8	0.14	5	0.09	10	0.17	7	0.12	5	0.09
Neurological	30	0.47	26	0.41	15	0.24	19	0.31	17	0.29	12	0.20	20	0.34	16	0.27	14	0.24	13	0.23
Gastrointestinal	3	0.05	<3	s	-	-	<3	s	-	-	<3	s	<3	s	<3	s	-	-	3	0.05
Other	8	0.13	10	0.16	9	0.15	13	0.21	13	0.22	9	0.15	10	0.17	8	0.13	12	0.20	4	0.07

's' indicates rate suppressed due to small numbers.

Sources: Numerator: PMMRC's perinatal data extract, neonatal deaths only, 2009–2018; Denominator: MAT births excluding fetal deaths 2009–2018.

Figure 3.3 presents the neonatal mortality rate by prioritised ethnic group (excluding congenital anomalies). This shows that the burden of mortality for all ethnic groups is in babies born before they reach 25 weeks' gestation. By prioritised ethnic group, neonatal mortality rates are statistically significantly higher in babies born to mothers of Indian, Pacific and Māori ethnicities, compared with babies with New Zealand European mothers.

Figure 3.3: Neonatal death risk (per 1,000 ongoing pregnancies) by gestational age at birth and maternal ethnicity excluding death with congenital anomalies 2009–2018*



* Unknown/Other ethnicity not represented.

MELAA = Middle Eastern, Latin American, or African.

's' indicates rate suppressed due to small numbers.

Sources: Numerator: PMMRC's perinatal data extract excluding congenital anomalies 2009–2018; Denominator: MAT live births 2009–2018.