

Te mate pēpi | Perinatal mortality

Death investigation

Overall, approximately half of babies had optimal investigation into the cause(s) of their death. This is defined here as post-mortem or karyotype confirming chromosomal abnormality or clinical examination/investigation confirming the diagnosis. This was higher for terminations of pregnancy and stillbirths, and less for neonatal deaths (Table 3.33).

Table 3.33: Perinatal related deaths and completeness of perinatal death investigations 2017

Perinatal death investigation	Fetal deaths				Neonatal deaths		Perinatal related deaths (total)	
	Termination of pregnancy		Stillbirths					
	n=133		n=287		n=171		n=591	
	n	%	n	%	n	%	n	%
Optimal investigation*	75	56.39	146	50.87	61	35.67	282	47.72
Post-mortem	43	32.33	131	45.64	46	26.90	220	37.23
Karyotype	31	23.31	12	4.18	8	4.68	51	8.63
Clinical examination/investigations confirm diagnosis	4	3.01	11	3.83	9	5.26	24	4.06
Partial investigations only#	49	36.84	104	36.24	97	56.73	250	42.30
Placental pathology performed*	74	55.64	231	80.49	126	73.68	431	72.93
No investigation^	9	6.77	37	12.89	13	7.60	59	9.98
Unknown	-	-	-	-	-	-	-	-

* Optimal investigation is defined as post-mortem or karyotype confirming congenital abnormality or clinical examination/investigation confirming diagnosis. Note: more than 1 option can be selected.

No post-mortem; investigations may have included placental pathology, magnetic resonance imaging (MRI), ultrasound scan or x-ray.

+ Includes both placental histology with post-mortem and as part of partial investigation.

^ No post-mortem, placental pathology, MRI, ultrasound scan or x-ray.

Source: PMMRC's perinatal data extract 2017.

Table 3.34 shows the degree to which perinatal deaths were investigated. There were higher proportions of Māori mothers who were offered post-mortem but declined, and consequently a larger number of Māori babies who did not have any investigation. The proportion of women who were not offered a post-mortem for their babies was reasonably consistent by prioritised ethnic group, with the exception of MELAA, who were not offered a post-mortem more frequently than other groups (Table 3.34).

Table 3.34: Perinatal related deaths and perinatal death investigations by prioritised ethnic group 2013–2017

Post-mortem examination offered	Māori		Pacific peoples		Asian						MELAA		European						Unknown/Other		Perinatal related deaths (total)	
	n=798		n=393		n=235		n=266		n=501		n=65		n=1,106		n=173		n=1,279		n=2		n=3,038	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Post-mortem offered and parental consent given	183	22.9	123	31.3	98	41.7	117	44.0	215	42.9	29	44.6	540	48.8	91	52.6	631	49.3	2.0	100.0	1,183	38.9
Post-mortem offered and parents declined	558	69.9	241	61.3	130	55.3	134	50.4	264	52.7	28	43.1	492	44.5	68	39.3	560	43.8	-	-	1,651	54.3
Post-mortem not offered	47	5.9	24	6.1	3	1.3	14	5.3	17	3.4	8	12.3	64	5.8	11	6.4	75	5.9	-	-	171	5.6
Unknown	10	1.3	5	1.3	4	1.7	<3	x	5	1.0	-	-	10	0.9	3	1.7	13	1.0	-	-	33	1.1
Optimal investigation*	252	31.6	156	39.7	113	48.1	162	60.9	275	54.9	38	58.5	655	59.2	112	64.7	767	60.0	2.0	100.0	1,490	49.0
Post-mortem	183	22.9	123	31.3	98	41.7	117	44.0	215	42.9	29	44.6	540	48.8	91	52.6	631	49.3	2.0	100.0	1,183	38.9
Karyotype	46	5.8	24	6.1	15	6.4	45	16.9	60	12.0	9	13.8	110	9.9	20	11.6	130	10.2	-	-	269	8.9
Clinical examination/ investigations confirm diagnosis	38	4.8	15	3.8	5	2.1	11	4.1	16	3.2	<3	x	56	5.1	6	3.5	62	4.8	-	-	133	4.4
Partial investigations only#	362	45.4	194	49.4	111	47.2	90	33.8	201	40.1	23	35.4	397	35.9	51	29.5	448	35.0	-	-	1,228	40.4
No investigation+	182	22.8	42	10.7	10	4.3	13	4.9	23	4.6	4	6.2	49	4.4	10	5.8	59	4.6	-	-	310	10.2
Unknown	<3	x	<3	x	<3	x	<3	x	<3	x	-	-	5	0.5	-	-	5	0.4	-	-	10	0.3

* Optimal investigation is defined as post-mortem or karyotype confirming congenital abnormality or clinical examination/investigation confirming diagnosis. Note: more than 1 option can be selected.

No post-mortem; investigations may have included placental pathology, magnetic resonance imaging (MRI), ultrasound scan or x-ray.

+ No post-mortem, placental pathology, MRI, ultrasound scan or x-ray.

'x' indicates percentage suppressed due to small numbers.

Source: PMMRC's perinatal data extract 2013–2017.