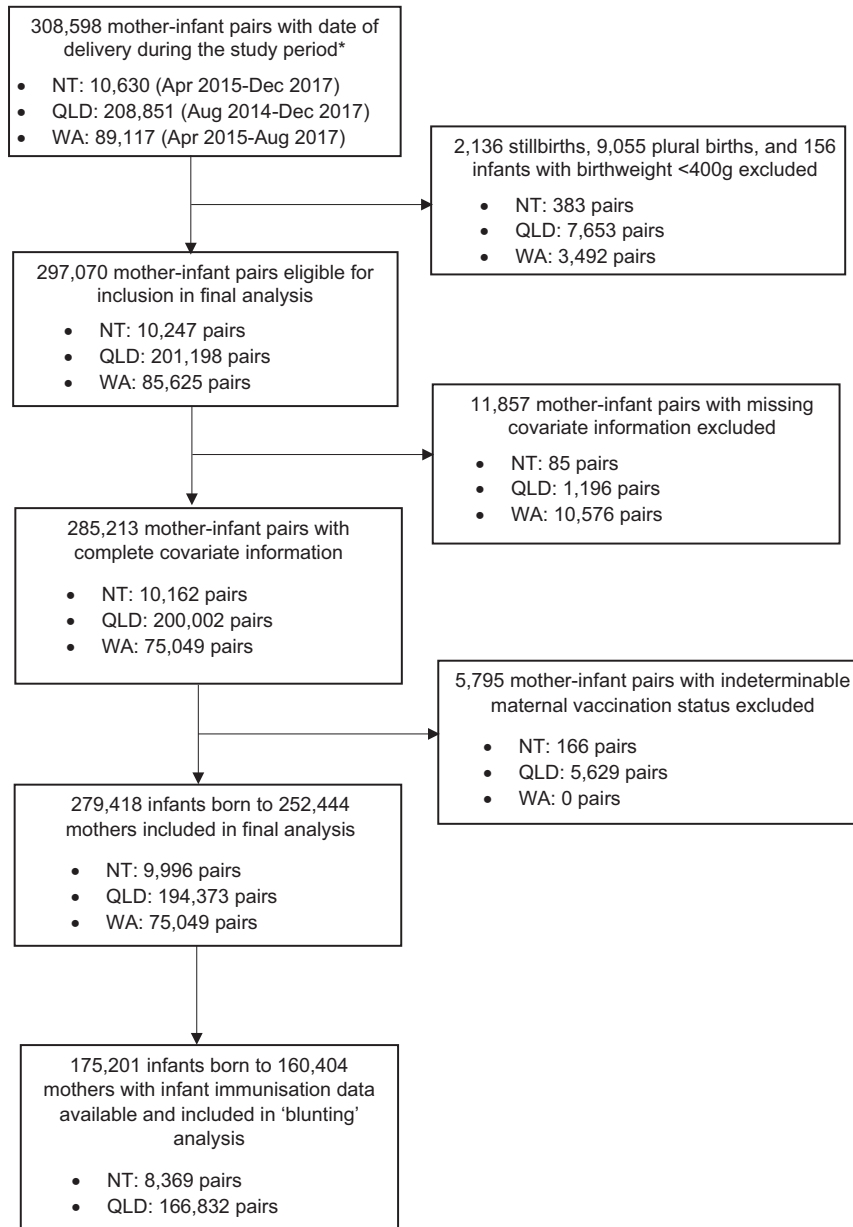
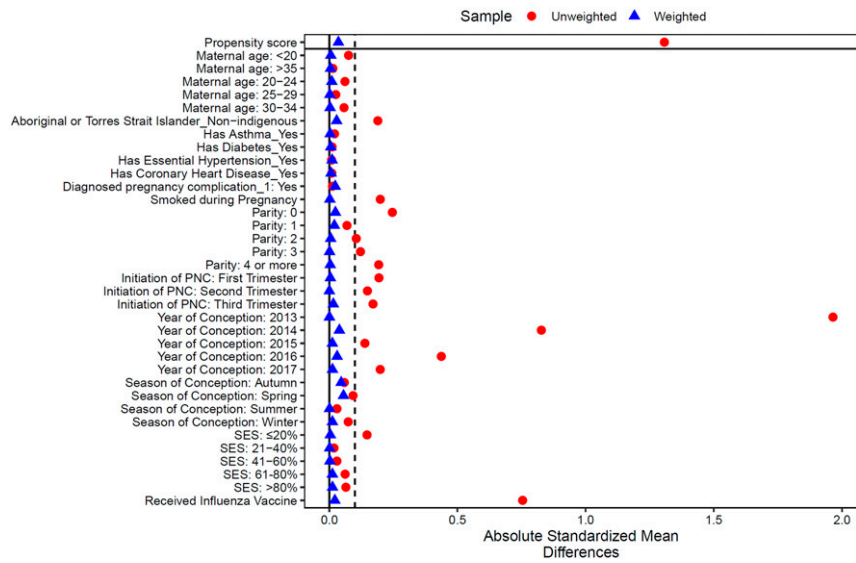


## Supplemental Information



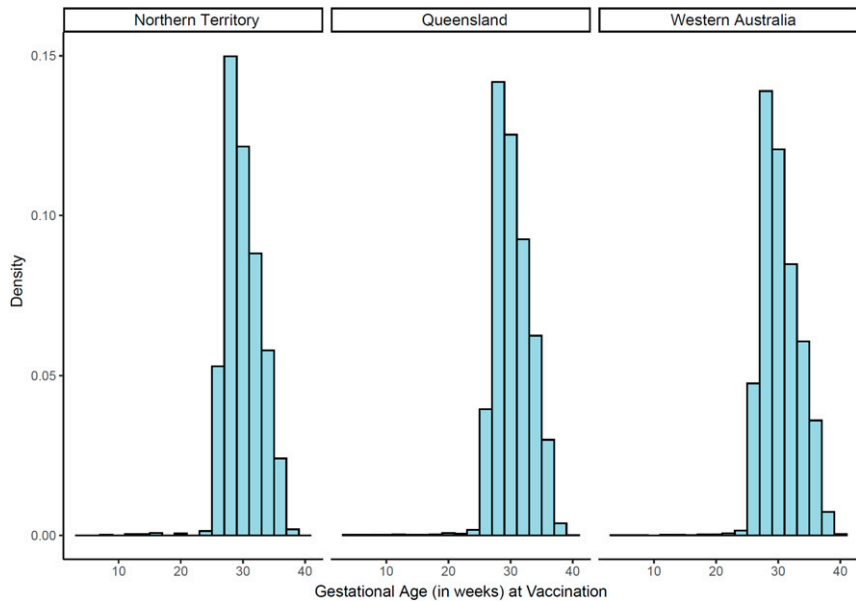
### SUPPLEMENTAL FIGURE 3

Flow diagram describing selection of mother-infant pairs into the study cohort. NT, Northern Territory; QLD, Queensland; WA, Western Australia. \*The study observation period began following the initiation of maternal pertussis vaccination program: August 2014 in QLD and April 2015 in NT and WA.



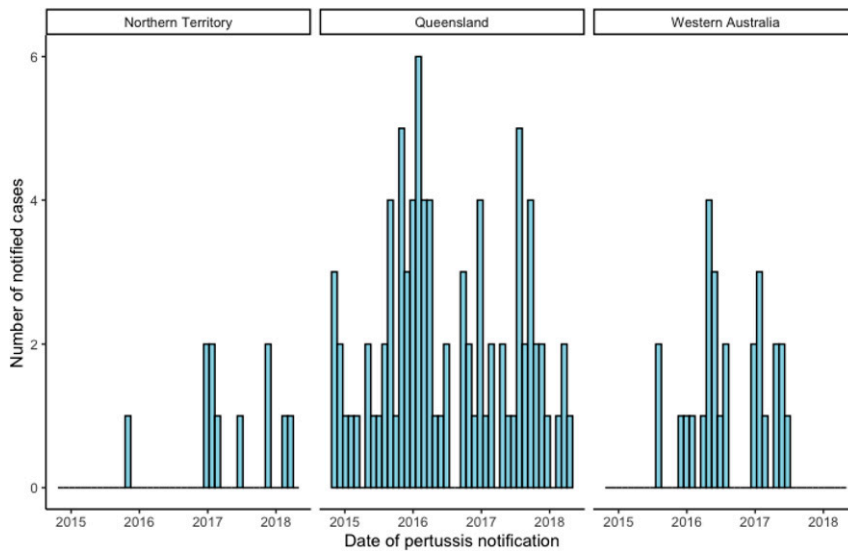
**SUPPLEMENTAL FIGURE 4**

Standardized mean difference between vaccinated and unvaccinated mother-infant pairs, by inverse probability of treatment weighting. PNC, perinatal care; SES, socioeconomic status.



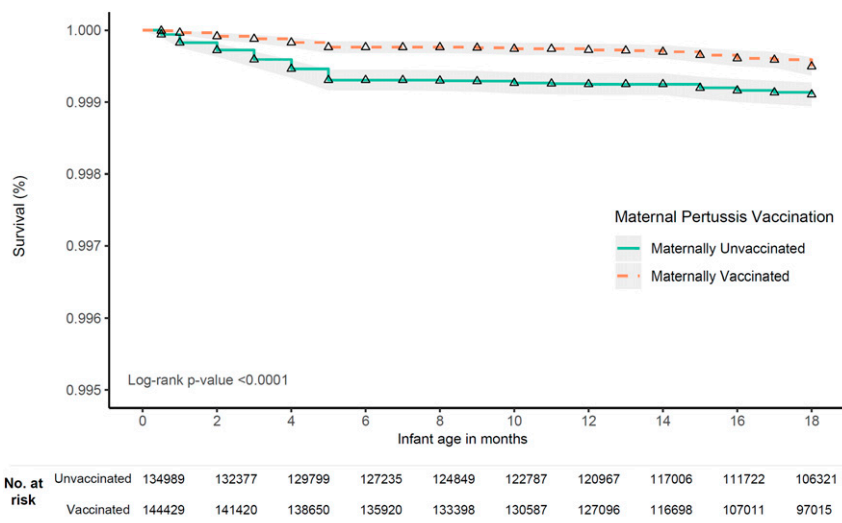
**SUPPLEMENTAL FIGURE 5**

Distribution of gestational age at the time of pertussis vaccination during pregnancy, by Australian state/territory.



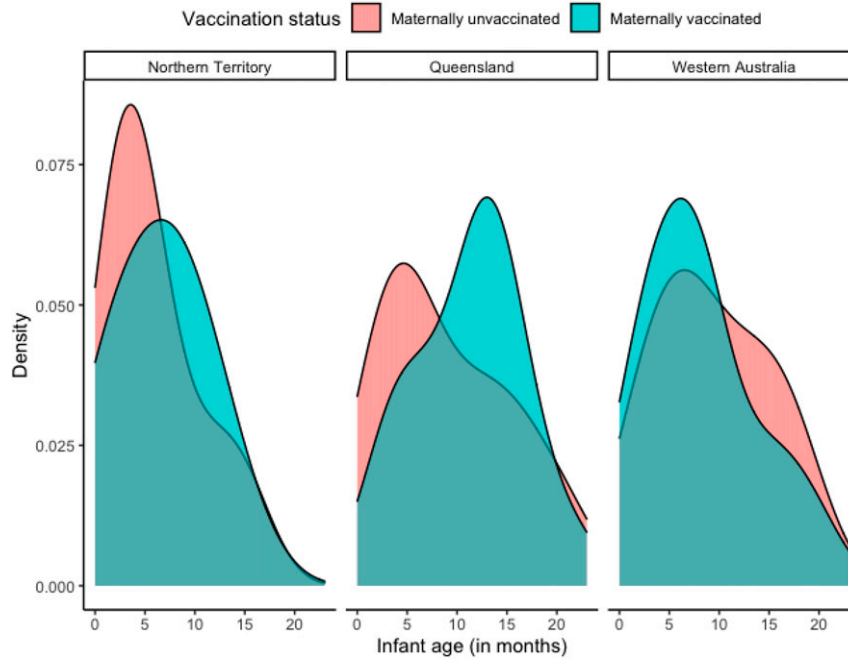
**SUPPLEMENTAL FIGURE 6**

Number of notified pertussis cases among infants <6 months old by Australian state/territory.



**SUPPLEMENTAL FIGURE 7**

Kaplan-Meier plot of pertussis infection, by maternal pertussis vaccination status.



### SUPPLEMENTAL FIGURE 8

Distribution of notified pertussis cases by infant age at diagnosis and Australian state/territory.

	Total	Vaccinated Cases per 1000 Infants	Unvaccinated Cases per 1000 Infants	VE (95% CI) <sup>a</sup>	IPTW VE (95% CI) <sup>b</sup>
Overall	279 418	8.3	27.4	69.1 (40.6–83.9)	71.5 (39.9–86.5)
By severity of disease					
Hospitalization	279 418	1.4	5.2	60.7 (–94.9 to 92.1)	54.0 (–48.7 to 85.8)
By vaccination timing gestational age at vaccination					
<28 wk	14 028	7.1	27.4	73.3 (–94.4 to 96.3)	59.3 (–48.0 to 88.8)
28–31 wk	80 327	8.7	27.4	67.3 (26.6–85.5)	67.9 (38.5–83.3)
≥32 wk	48 629	8.2	27.4	70.0 (15.4–89.3)	76.0 (44.9–89.5)
Time between vaccination and birth					
2–6 wk	39 975	7.5	27.4	72.6 (10.7–91.6)	76.2 (41.1–90.3)
7–11 wk	81 377	8.6	27.4	68.1 (28.2–85.8)	69.6 (41.7–84.1)
≥12 wk	21 632	9.2	27.4	64.5 (–47.3 to 91.5)	58.4 (–29.5 to 85.9)

CI, confidence interval; dTpa, diphtheria-tetanus-acellular pertussis vaccine; IPTW, inverse probability of treatment weighted; VE, vaccine effectiveness.

<sup>a</sup> VE was estimated as 1 – hazard ratio derived from a Cox proportional hazard model with infant age in months as the underlying time variable.

<sup>b</sup> IPTW VE estimates were weighted by the inverse probability of receiving dTpa vaccine during pregnancy. Probabilities were derived from multivariable logistic regressions predicting the odds of vaccination by maternal age, First Nations status, asthma, diabetes, hypertension, coronary heart disease, diagnosis of a pregnancy complication, parity, smoking status, trimester of prenatal care initiation, year of conception, socioeconomic status, and receipt of influenza vaccine.