

Maternal and Infant Complications

Tables 8a and 8b show prevalence of delivery-related maternal and infant outcomes that may be associated with a GDM pregnancy. In all time periods, infants born to women with GDM were more frequently born preterm, admitted to the NICU, and delivered by C-Section. NICU admission increased over time both among infants born to women with and without GDM. In 2016, the data analyzed was not statistically significant therefore it was challenging to draw accurate comparisons across years for length of hospitalization, NICU length of stay, and high blood pressure.

Table 8a. Prevalence of maternal and delivery outcomes, by GDM status, Ohio 2006-08, 2009-10, and 2016

	2006-08					2009-10					2016				
	% With GDM	95% CI	% Without GDM	95% CI	P-Value	% With GDM	95% CI	% Without GDM	95% CI	P-Value	% With GDM	95% CI	% Without GDM	95% CI	P-Value
Infant															
Baby in ICU	16.1	12.4-20.5	10.7	9.7-11.8	0.01	13.5	9.7-18.4	10.4	9.1-11.8	ns	14.3	9.1 - 19.5	12.9	11.1 - 14.7	ns
Length of Hospitalization	p<0.01					p=0.05					ns				
1-2 days	48.2	41.8-54.7	57.9	55.8-559.9		53.3	45.3-61.2	61.8	59.2-64.3		58.4	49.5-67.2	57.1	54.1-60.0	
3 days	24.5	19.3-30.6	22.9	21.2-24.7		35.2 (3-5 days)	28.0-43.4	28.7 (3-5 days)	26.3-31.1		29.6 (3-5 days)	21.5-37.6	29.7 (3-5 days)	26.9-32.4	
4 days	13.3	9.5-18.3	7.5	6.5-8.6											
5 days	4.0	2.3-7.0	2.5	2.0-3.2											
6 days +	8.9	6.5-12.1	6.8	6.0-7.6											
Maternal															
High Blood Pressure	23.3	18.6-28.8	12.0	10.8-13.4	<0.01	24.8	18.7-32.2	13.5	11.8-15.4	<0.01	18.7	12.1-25.2	12.8	10.9-14.8	ns
Preterm Labor	20.7	25.2-36.9	23.9	22.2-25.7	<0.01	29.4	22.7-37.1	22.3	20.2-24.6	ns	Not assessed				
Cesarean Section Delivery	37.1	31.3-43.3	28.4	26.6-30.3	<0.01	46.8	39.0-54.8	28.9	26.5-31.3	<0.01	43.7	34.2-53.1	27.9	25.3-30.5	<0.01

Sources: 2006-2010 Pregnancy Risk Assessment Monitoring System, Ohio Department of Health. 2016 Ohio Pregnancy Assessment Survey.

Footnotes:

PRAMS Phase 5 of (2004-08) GDM was determined by the following questions: “Did you have high blood sugar (diabetes) that started during this pregnancy?” PRAMS Phase 6 (2009-11) GDM was determined by the following question: “During your most recent pregnancy, were you told by a doctor, nurse, or other health care worker that you had gestational diabetes (diabetes that started during this pregnancy)?” OPAS 2016 Question #30 (and consistent with PRAMS Phase 7) determined GDM from the following question: “During your most recent pregnancy, did you have any of the following health conditions? a) Gestational diabetes (diabetes that started during this pregnancy).”

* CDC. Gestational Diabetes and Pregnancy. <http://www.cdc.gov/pregnancy/diabetes-gestational.html>

Table 8b. Prevalence of delivery complications, by GDM status, Ohio 2006-08, 2009-11, 2012-14, and 2015-16

	2006-08				2009-11				2012-14				2015-16	
	% With GDM	95% CI	% W/out GDM	95% CI	% GDM	95% CI	% W/out GDM	95% CI	% With GDM	95% CI	% W/out GDM	95% CI	% With GDM	% W/out GDM
Preterm														
Preterm	15.6	15.1-16.0	10.5	10.5-10.6	14.9	14.5-15.4	9.9	9.8-10.0	14.4	14.0-14.8	10.0	9.9-10.1	15.0	10.1
NICU Admission														
Yes	9.4	9.0-9.8	5.9	5.8-5.9	10.3	9.9-10.7	6.5	6.4-6.6	12.1	11.7-12.5	8.0	7.9-8.1	13.4	8.8
C-section														
Yes	43.2	42.5-43.8	29.2	29.1-29.3	44.2	43.6-44.8	30.2	30.0-30.3	44.0	43.4-44.6	29.9	29.8-30.1	43.8	29.7
Apgar Group														
0-4	1.3	1.2-1.5	1.4	1.3-1.4	1.1	1.0-1.3	1.2	1.1-1.2	1.1	0.9-1.2	1.1	1.1-1.2	1.0	1.1
5-6	2.1	1.9-2.3	1.6	1.6-1.6	1.4	1.3-1.6	1.3	1.2-1.3	1.5	1.4-1.6	1.3	1.2-1.3	1.6	1.4
7-10	96.5	96.2-96.7	96.7	96.7-96.8	97.3	97.1-97.5	97.3	97.3-97.4	97.3	97.1-97.5	97.3	97.3-97.4	97.4	97.5

Source: Vital Statistics; Resident File was used.