

Web Table 1. The International Classification of Diseases, Version 9 (ICD-9) Codes Used to Identify the Exposure and Outcomes in the Consortium on Safe Labor, 2002-2008

<b>Definition in the current study</b>	<b>Collected ICD-9 codes</b>	<b>Definition</b>
<b>Thyroid diseases</b>		
Primary hypothyroidism	244	Acquired hypothyroidism
	244.8	Other specified acquired hypothyroidism
	244.9	Unspecified hypothyroidism
Iatrogenic hypothyroidism	244	Postsurgical hypothyroidism
	244.1	Other postablative hypothyroidism
	244.2	Iodine hypothyroidism
	244.3	Other iatrogenic hypothyroidism
	243	Congenital hypothyroidism
Hyperthyroidism	242-242.9	Thyrotoxicosis with or without goiter
Other or unspecific thyroid diseases	193	Malignant neoplasm of thyroid gland
	226	Benign neoplasm of thyroid glands
	240-240.9	Simple and unspecified goiter
	241-241.9	Nontoxic nodular goiter
	245-245.9	Thyroiditis
	246-246.9	Other disorders of thyroid
	648.1	Other current conditions in the mothers classifiable elsewhere but complicating pregnancy, childbirth, or the puerperium - thyroid dysfunction
<b>Other chronic diseases</b>		
Asthma	493-493.9	Asthma

Diabetes	250-250.9	Diabetes mellitus
		Other current conditions in the mothers
	648	classifiable elsewhere but complicating pregnancy, childbirth, or the puerperium - diabetes mellitus
Hypertension	401	Essential hypertension
	402	Hypertensive heart disease
	403	Hypertensive renal disease
	404	Hypertensive heart and renal disease
	405	Secondary hypertension
	642	Benign essential hypertension complicating pregnancy, childbirth, and the puerperium
		Hypertension secondary to renal disease
	642.1	complicating pregnancy childbirth and the puerperium
	642.2	Other pre-existing hypertension complicating pregnancy, childbirth, and the puerperium
Heart disease	393	Chronic rheumatic pericarditis
	394	Diseases of the mitral valve
	395	Diseases of the aortic valve
	396	Diseases of mitral and aortic valve
	397	Diseases of other endocardial structures
	398	Other rheumatic heart disease
	410	Acute myocardial infarction
	411	Other acute and subacute forms of ischemic heart disease
	412	Old myocardial infarction

	413	Angina pectoris
	414	Other forms of chronic ischemic heart disease
	423	Other diseases of pericardium
	424	Other diseases of endocardium
	425	Cardiomyopathy
	426	Conduction disorders
	427	Cardiac dysrhythmias
	428	Heart failure
	429	Ill-defined descriptions and complications of heart disease
Gastrointestinal disease	555	Regional enteritis
	556	Idiopathic proctocolitis
	557	Vascular insufficiency of intestine
	558	Other noninfectious gastroenteritis and colitis
Kidney disease	585	Chronic renal failure
	586	Renal failure, unspecified
	588	Disorders resulting from impaired renal function
	646.2	Unspecified renal disease in pregnancy, without mention of hypertension
Depression	311	Depressive disorder, not elsewhere classified
	296.2	Major depressive disorder, single episode
	296.3	Major depressive disorder, recurrent episode
<b>Outcomes</b>		
Intrauterine fetal death	656.4	Intrauterine fetal death
Respiratory distress syndrome	769	Respiratory distress syndrome
Intracerebral hemorrhage	767.0	Subdural and cerebral hemorrhage

	772.2	Subarachnoid hemorrhage
Seizure	779.0	Convulsions in the newborn
	780.32	Complex febrile convulsions
	780.39	Other convulsions
Oliguria	788.5	Oliguria and anuria
Cardiomyopathy	425	Cardiomyopathy
Peri- or intraventricular hemorrhage	772.10-772.14	Intraventricular hemorrhage of fetus or newborn
Necrotizing enterocolitis	777.5	Necrotizing enterocolitis in newborn
Retinopathy of prematurity	362.21	Retinopathy of prematurity
Sepsis	771.81	Septicemia [sepsis] of newborn
	038	Septicemia
	995.91	Sepsis
	995.92	Severe sepsis
Transient tachypnea	770.6	Transitory tachypnea of newborn
Anemia	776.5	Congenital anemia
	776.6	Anemia of prematurity
Apnea	770.81	Primary apnea of newborn
	770.82	Other apnea of newborn
	786.03	Apnea
Asphyxia	768.5	Severe birth asphyxia
	768.6	Mild or moderate birth asphyxia
	768.9	Unspecified asphyxia in liveborn infant
Infectious pneumonia	480	Viral pneumonia
	481	Pneumococcal pneumonia
	482	Other bacterial pneumonia

	483	Pneumonia due to other specified organism
	484	Pneumonia in infectious diseases classified elsewhere
	485	Bronchopneumonia, organism unspecified
	486	Pneumonia, organism unspecified
	487.0	Influenza with pneumonia
	770.0	Congenital pneumonia
Aspiration	770.1	Fetal and newborn aspiration
	770.85	Aspiration of postnatal stomach contents without respiratory symptoms
	770.86	Aspiration of postnatal stomach contents with respiratory symptoms
Neonatal thyroid disease	243	Congenital hypothyroidism
	775.3	Neonatal thyrotoxicosis
		All other codes 240-246

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Web Table 2. Birth Weight Categories of Female and Male Infants by Gestational Age in the Consortium on Safe Labor, 2002-2008

Gestational age (weeks)	Singleton female infants			Singleton male infants		
	N	Birth weight (g)		N	Birth weight (g)	
		10th percentile	90th percentile		10th percentile	90th percentile
23	156	367	747	202	455	810
24	214	423	820	229	500	910
25	190	482.5	920.5	204	590	1,094
26	214	590	1,050	232	633	1,210
27	224	660	1,190	253	751	1,327
28	230	785	1,540	300	826	1,550
29	321	875	1,710	332	915	1,714
30	424	1,049	1,880	393	1,127	2,010
31	445	1,206	2,155	520	1,246	2,132.5
32	614	1,380	2,400	731	1,460	2,430
33	865	1,605	2,640	918	1,635	2,776
34	1,339	1,758	2,795	1,535	1,880	2,878
35	2,152	2,041	3,080	2,511	2,102	3,171
36	4,557	2,238	3,310	4,970	2,350	3,436
37	9,959	2,465	3,525	10,861	2,570	3,650
38	21,853	2,690	3,714	23,287	2,800	3,860
39	33,516	2,840	3,853	34,579	2,950	4,002
40	22,358	2,936	3,962	22,328	3,047	4,111
41	7,480	3,015	4,080	7,549	3,140	4,228
≥42	722	2,994	4,095	780	3,091.5	4,309.5

Web Table 3. Site-adjusted Odds Ratios of Singleton Neonatal Outcomes Associated with Maternal Thyroid Diseases in the Consortium on Safe Labor, 2002-2008

Neonatal complications	Primary hypothyroidism (N=3,183)		Iatrogenic hypothyroidism (N=178)		Hyperthyroidism (N=417)		Other or unspecific thyroid disease (N=2,833)	
	OR <sup>a</sup>	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Perinatal mortality	0.90	0.55, 1.48	1.05	0.15, 7.31	1.91	0.78, 4.69	1.15	0.73, 1.82
Neonatal resuscitation	1.06	0.97, 1.17	1.45	1.00, 2.12	1.44	1.13, 1.83	0.98	0.89, 1.07
Level of resuscitation CPAP or higher <sup>b</sup>	1.03	0.81, 1.31	1.52	0.65, 3.54	1.78	0.99, 3.20	0.97	0.72, 1.31
NICU admission	1.21	1.09, 1.35	1.74	1.18, 2.55	1.78	1.40, 2.26	1.13	1.01, 1.27
Respiratory distress syndrome	1.30	1.08, 1.55	1.9	1.03, 3.51	1.94	1.32, 2.85	1.20	0.99, 1.46
Apnea <sup>c</sup>	1.37	1.10, 1.69	1.76	0.80, 3.86	2.13	1.39, 3.25	1.44	1.12, 1.85
Transient tachypnea	1.34	1.13, 1.58	1.48	0.75, 2.91	1.71	1.16, 2.53	1.01	0.81, 1.24
Sepsis	1.27	1.04, 1.56	2.71	1.49, 4.93	1.7	1.10, 2.62	1.17	0.93, 1.47
Anemia	1.26	0.98, 1.61	2.82	1.41, 5.65	1.72	1.04, 2.85	1.20	0.91, 1.58

Abbreviation: OR, odds ratio; CI, confidence interval; aOR, adjusted odds ratio; CPAP, continuous positive airway pressure; NICU, neonatal intensive care unit.

<sup>a</sup>ORs are obtained from multivariate logistic regression with generalized estimating equations to account for correlated data. All results are adjusted for site.

<sup>b</sup>Level of resuscitation is missing for 498 infants with documented need of resuscitation. <sup>c</sup>Apnea is missing all observations from one study site (N=20596).

Web Table 4. Site-Adjusted Odds Ratios of Rare Neonatal Outcomes of Pregnancies Associated With Maternal Thyroid Diseases in the Consortium on Safe Labor, 2002-2008

Rare neonatal complications	Hypothyroidism (N=3361)		Hyperthyroidism (N=417)		Other or unspecified thyroid disease (N=2833)	
	OR <sup>a</sup>	95% CI	OR	95% CI	OR	95% CI
Any peri- or intraventricular hemorrhage	1.34	0.91, 1.99	1.72	0.71, 4.17	1.02	0.60, 1.74
Intracerebral hemorrhage	1.29	0.61, 2.73	Not applicable		0.91	0.41, 2.03
Seizure	0.68	0.25, 1.84	Not applicable		0.75	0.28, 2.00
Oliguria	0.80	0.11, 5.81	Not applicable		1.37	0.19, 10.1
Cardiomyopathy	3.74	0.90, 15.6	11.5	1.48, 89.7	2.30	1.13, 4.71
Necrotizing enterocolitis	1.01	0.45, 2.27	2.29	0.56, 9.30	1.48	0.73, 3.00
Retinopathy of prematurity	1.26	0.77, 2.08	2.61	1.16, 5.87	1.65	0.97, 2.82
Asphyxia	0.93	0.46, 1.88	2.53	0.82, 7.87	0.93	0.44, 1.96
Aspiration with or without pneumonia	0.57	0.30, 1.06	0.91	0.23, 3.67	1.26	0.80, 1.99
Infective pneumonia	0.71	0.45, 1.14	1.30	0.48, 3.50	1.35	0.90, 2.02
Any neonatal thyroid disease	3.32	1.02, 10.8	50.8	22.5, 115	2.18	0.29, 16.5



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Abbreviation: OR, odds ratio; CI, confidence interval; aOR, adjusted odds ratio. <sup>a</sup>ORs are obtained from multivariate logistic regression with generalized estimating equations to account for correlated data. All results are adjusted for site.

Web Table 5. The Site-Adjusted Odds Ratios of the Indicators of Fetal Growth by Maternal Thyroid Diseases in the Consortium on Safe Labor (2002-2008), Stratified by Race/Ethnicity

	<b>No thyroid disease (N=216901)</b>	<b>Hypothyroidism (N=3361)</b>	<b>Hyperthyroidism (N=417)</b>		<b>Other or unspecified thyroid disease (N=2833)</b>		
<b>Non-Hispanic White</b>							
Term birth weight <2500 g, OR 95% CI <sup>a,b</sup>	1.00	1.01	0.75, 1.37	1.76	0.77, 4.05	1.00	0.75, 1.35
Term birth weight ≥4000 g, OR 95% CI <sup>a,b</sup>	1.00	1.06	0.92, 1.21	0.87	0.50, 1.50	1.11	0.95, 1.31
SGA, OR 95% CI <sup>a,b</sup>	1.00	0.93	0.79, 1.09	1.30	0.80, 2.12	0.95	0.80, 1.13
LGA, OR 95% CI <sup>a,b</sup>	1.00	1.30	1.16, 1.45	1.02	0.66, 1.58	1.32	1.16, 1.51
<b>Non, Hispanic Black</b>							
Term birth weight <2500 g, OR 95% CI <sup>a,b</sup>	1.00	1.34	0.70, 2.57	2.38	1.24, 4.54	0.30	0.10, 0.93
Term birth weight ≥4000 g, OR 95% CI <sup>a,b</sup>	1.00	0.48	0.21, 1.09	0.51	0.17, 1.59	0.75	0.41, 1.38
SGA, OR 95% CI <sup>a,b</sup>	1.00	1.38	0.98, 1.93	0.92	0.56, 1.51	0.99	0.71, 1.38
LGA, OR 95% CI <sup>a,b</sup>	1.00	1.05	0.64, 1.73	1.41	0.81, 2.45	0.96	0.59, 1.56
<b>Hispanic</b>							
Term birth weight <2500 g, OR 95% CI <sup>a,b</sup>	1.00	1.65	0.86, 3.16	1.14	0.15, 8.85	0.72	0.30, 1.78
Term birth weight ≥4000 g, OR 95% CI <sup>a,b</sup>	1.00	1.25	0.83, 1.90	Not applicable		0.95	0.64, 1.41
SGA, OR 95% CI <sup>a,b</sup>	1.00	1.09	0.75, 1.59	2.12	1.02, 4.43	0.77	0.50, 1.19

LGA, OR 95% CI <sup>a,b</sup>	1.00	1.66	1.20, 2.30	1.03	0.38, 2.81	1.62	1.20, 2.18
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Abbreviation: OR, odds ratio; CI, confidence interval; SGA, small for gestational age; LGA, large for gestational age. <sup>a</sup>Birth weight was missing or improbable for 2649 (1.2%) observations and excluded from all analyses. N=41,990 preterm births are excluded from the analysis of term birth weight. All babies with unknown or ambiguous sex (N=316) are excluded. <sup>b</sup>ORs are obtained from multivariate logistic regression with generalized estimating equations to account for correlated data. All results are adjusted for site.