

# Smoking During Pregnancy Among Erie County Mothers, 2012-2014

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December, 2016

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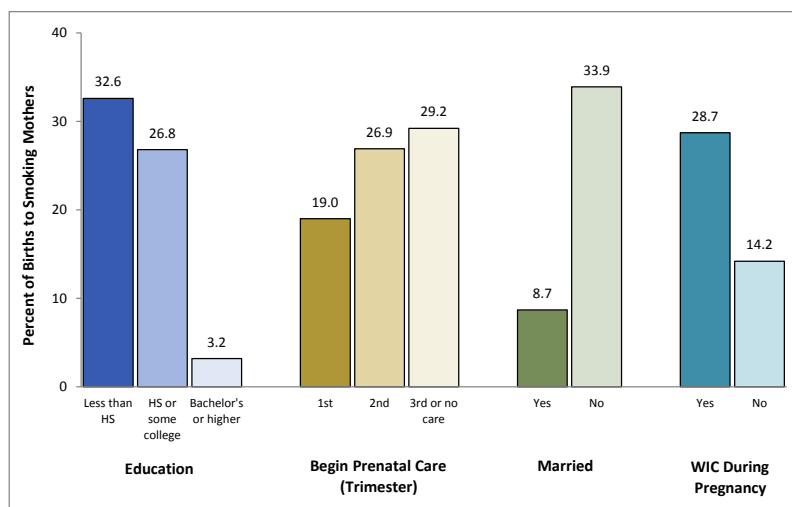
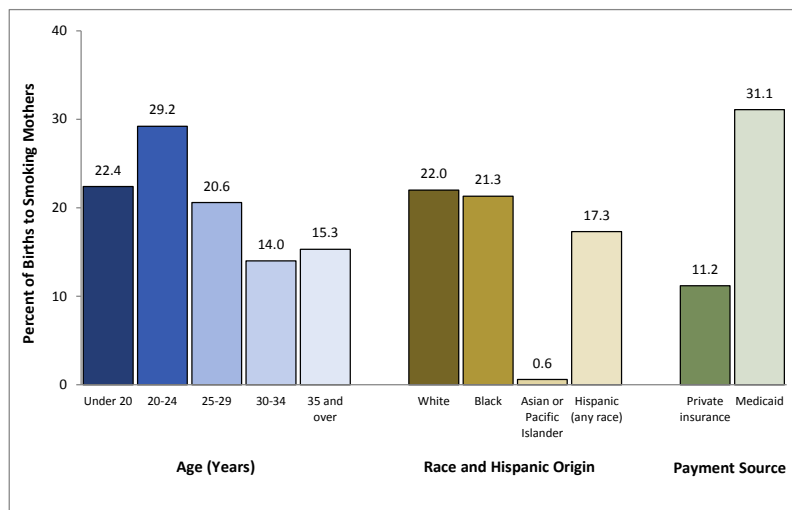
**Public Health**  
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This report was prepared by Jeff Quirk, Epidemiologist ([jquirk@eriecountypa.gov](mailto:jquirk@eriecountypa.gov)). The primary sources of data and information for this report are the Erie County Department of Health, the Pennsylvania Department of Health, and the National Center for Health Statistics. Federal and state sources are not responsible for any of the analyses, interpretations, or conclusions herein.

**Background:** Smoking during pregnancy is a modifiable risk factor that contributes to poor birth and maternal outcomes, including preterm birth, low birth weight, birth defects, infant mortality, placental problems, and miscarriage.

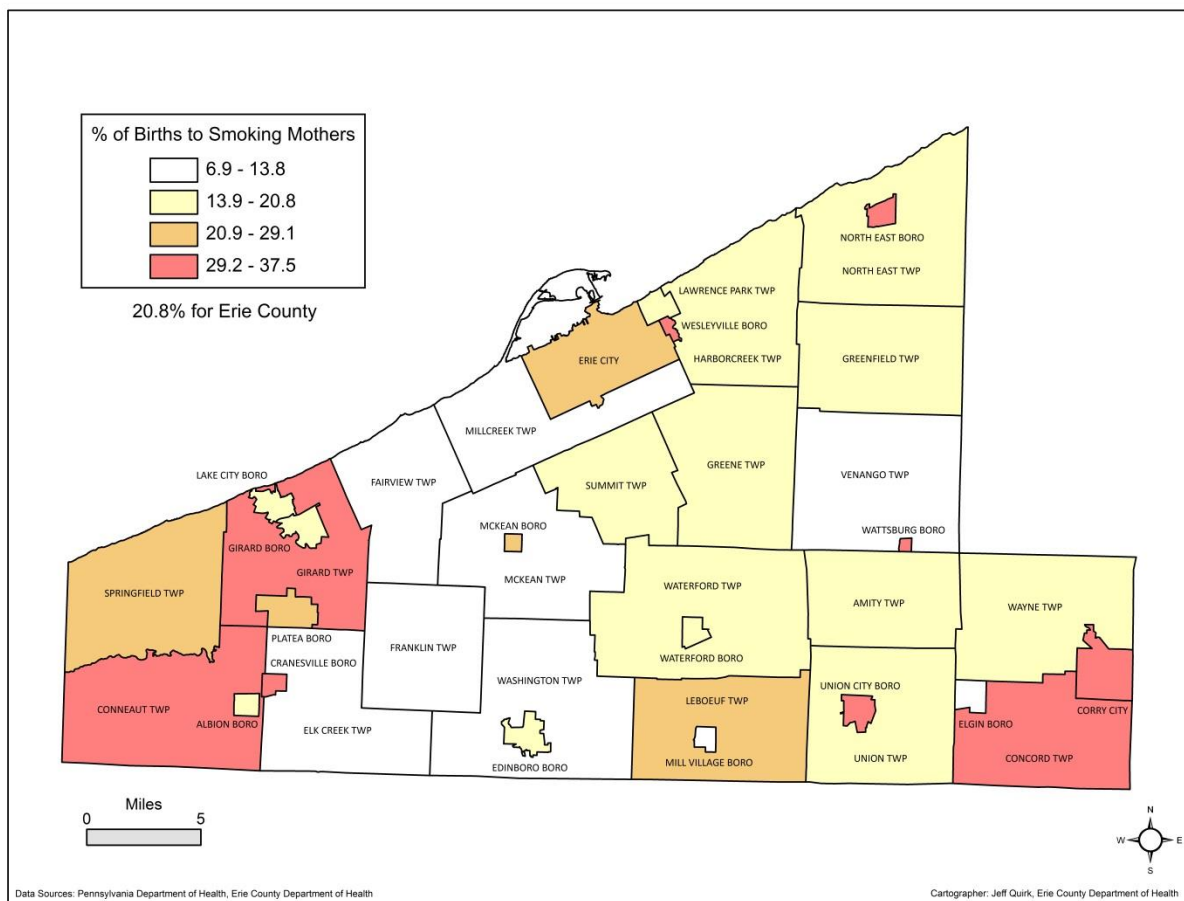
- During 2012-2014, 20.8% of Erie County mothers reported smoking at any time during pregnancy. While lagging behind both Pennsylvania (14.2%) and the U.S. (8.4% in 2014), this figure marked a historic record low for Erie County.
- Although the county prevalence of maternal smoking did not substantially change in over two decades, the percentage has steadily decreased for every 3-year period since 2007-2009, when it equaled 28.0%.
- Considerable variations in the prevalence of maternal smoking were seen by maternal characteristics (Figures 1 & 2, Table 1). Groups with the highest smoking rates included women aged 20-24 (29.2%), White women (22.0%), women with Medicaid (31.1%), women with less than a high school education (32.6%), women who began prenatal care in the 3rd trimester or had no care (29.2%), unmarried women (33.9%), and women who received WIC benefits (28.7%).

Figures 1 & 2. Prevalence of Maternal Smoking During Pregnancy by Maternal Characteristics



- Significant geographic variations in the prevalence of maternal smoking were observed across Erie County's 38 municipalities (Figure 3, Table 2).
- Maternal smoking ranged from a low of 6.9% in Venango Township to a high of 37.5% in Cranesville Borough. The prevalence was lower than or equal to the Erie County rate of 20.8% in 24 municipalities, whereas it was higher in 14 municipalities.
- Maternal smoking was lower than 10.0% in four municipalities: Venango Township (6.9%), Fairview Township (7.9%), Elk Creek Township (9.8%), and Washington Township (9.8%).
- Maternal smoking was higher than 30.0% in eight municipalities: North East Borough (31.0%), Girard Township (31.1%), Concord Township (31.3%), Wesleyville Borough (31.7%), the City of Corry (34.8%), Wattsburg Borough (34.8%), Union City Borough (36.3%), and Cranesville Borough (37.5%).

Figure 3. Prevalence of Maternal Smoking During Pregnancy for Erie County Municipalities



- From an overall numbers perspective, 1,573 out of 1,964 smoking mothers (80.1%) resided in just seven municipalities: the City of Erie (1,090 smoking mothers), Millcreek Township (190), the City of Corry (97), Harborcreek Township (62), North East Borough (48), Union City Borough (45), and Girard Township (41).

Table 1. Prevalence of Maternal Smoking During Pregnancy by Maternal Characteristics

<u>Maternal Characteristics</u>	<u>Available Data</u>	<u>Smoking During Pregnancy</u>		<u>Non-Smoking During Pregnancy</u>	
		<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
All mothers	9,431 births	1,964	20.8	7,467	79.2
Age (years)	9,415 births				
Under 20		181	22.4	628	77.6
20-24		702	29.2	1,701	70.8
25-29		591	20.6	2,278	79.4
30-34		313	14.0	1,918	86.0
35 and over		169	15.3	934	84.7
Race and Hispanic origin	9,371 births				
White		1,569	22.0	5,557	78.0
Black		240	21.3	887	78.7
Asian/Pacific Islander		2	0.6	331	99.4
Hispanic (of any race)		96	17.3	460	82.7
Payment source for delivery	9,276 births				
Private insurance		544	11.2	4,315	88.8
Medicaid		991	31.1	2,193	68.9
Education	9,338 births				
Less than high school		462	32.6	955	67.4
High school or some college		1,401	26.8	3,827	73.2
Bachelor's degree or higher		86	3.2	2,607	96.8
Prenatal care initiation	9,285 births				
1st trimester		1,382	19.0	5,891	81.0
2nd trimester		388	26.9	1,052	73.1
3rd trimester or no care		167	29.2	405	70.8
Marital status	9,409 births				
Married		427	8.7	4,473	91.3
Unmarried		1,530	33.9	2,979	66.1
WIC receipt during pregnancy	9,226 births				
Yes		1,234	28.7	3,059	71.3
No		700	14.2	4,233	85.8

WIC = Special Supplemental Nutrition Program for Women, Infants, and Children

Table 2. Prevalence of Maternal Smoking During Pregnancy for Erie County Municipalities

<u>Municipality</u>	<u>Births</u>	<u>Smoking During Pregnancy</u>		<u>Non-Smoking During Pregnancy</u>	
		<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Albion Borough	44	9	20.5	35	79.5
Amity Township	20	4	20.0	16	80.0
Concord Township	32	10	31.3	22	68.8
Conneaut Township	48	14	29.2	34	70.8
City of Corry	279	97	34.8	182	65.2
Cranesville Borough	16	6	37.5	10	62.5
Edinboro Borough	96	15	15.6	81	84.4
Elgin Borough	8	1	12.5	7	87.5
Elk Creek Township	51	5	9.8	46	90.2
City of Erie	4,575	1,090	23.8	3,485	76.2
Fairview Township	252	20	7.9	232	92.1
Franklin Township	35	4	11.4	31	88.6
Girard Borough	95	15	15.8	80	84.2
Girard Township	132	41	31.1	91	68.9
Greene Township	107	15	14.0	92	86.0
Greenfield Township	49	9	18.4	40	81.6
Harborcreek Township	399	62	15.5	337	84.5
Lake City Borough	109	20	18.3	89	81.7
Lawrence Park Township	128	24	18.8	104	81.3
LeBoeuf Township	38	8	21.1	30	78.9
McKean Borough	21	5	23.8	16	76.2
McKean Township	113	15	13.3	98	86.7
Millcreek Township	1,474	190	12.9	1,284	87.1
Mill Village Borough	17	2	11.8	15	88.2
North East Borough	155	48	31.0	107	69.0
North East Township	162	31	19.1	131	80.9
Platea Borough	14	4	28.6	10	71.4
Springfield Township	98	21	21.4	77	78.6
Summit Township	188	31	16.5	157	83.5
Union Township	60	11	18.3	49	81.7
Union City Borough	124	45	36.3	79	63.7
Venango Township	58	4	6.9	54	93.1
Washington Township	122	12	9.8	110	90.2
Waterford Borough	53	11	20.8	42	79.2
Waterford Township	97	18	18.6	79	81.4
Wattsburg Borough	23	8	34.8	15	65.2
Wayne Township	38	7	18.4	31	81.6
Wesleyville Borough	101	32	31.7	69	68.3
Erie County	9,431	1,964	20.8	7,467	79.2