



Pre-Pregnancy Overweight and Obesity

Preconception Health

Pre-pregnancy overweight or obesity is a disproportionately high body weight in relation to height when a woman becomes pregnant. Body mass index (BMI) is a measure used to compare weight to height. Based on reported weight and height, a woman is then classified as obese, overweight, normal weight or underweight.

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|----------------------|--|
| Obese | BMI \geq 30 kg/m ² |
| Overweight | BMI \geq 25 kg/m ² but < 30 kg/m ² |
| Normal weight | BMI \geq 18.5 kg/m ² but < 25 kg/m ² |
| Underweight | BMI < 18.5 kg/m ² |

Size of the Problem

Close to half (46 percent) of U.S. women were overweight or obese when they became pregnant (based on self-reported height and weight in 29 states, 2009) (Fisher et al., 2013).

Health Impact

It is well-established that obesity is associated with poor health outcomes at any point in life and that overweight is a predictor of future obesity. In addition, pre-pregnancy obesity has been associated with multiple adverse maternal and infant outcomes. Pre-pregnancy obesity has also been associated with later adverse outcomes in offspring, including overweight and obesity.

Complications during pregnancy include:

- Diabetes mellitus
- Hypertension
- Preeclampsia
- Fetal loss

Complications during labor and delivery include:

- Caesarean section
- Hemorrhage
- Infection

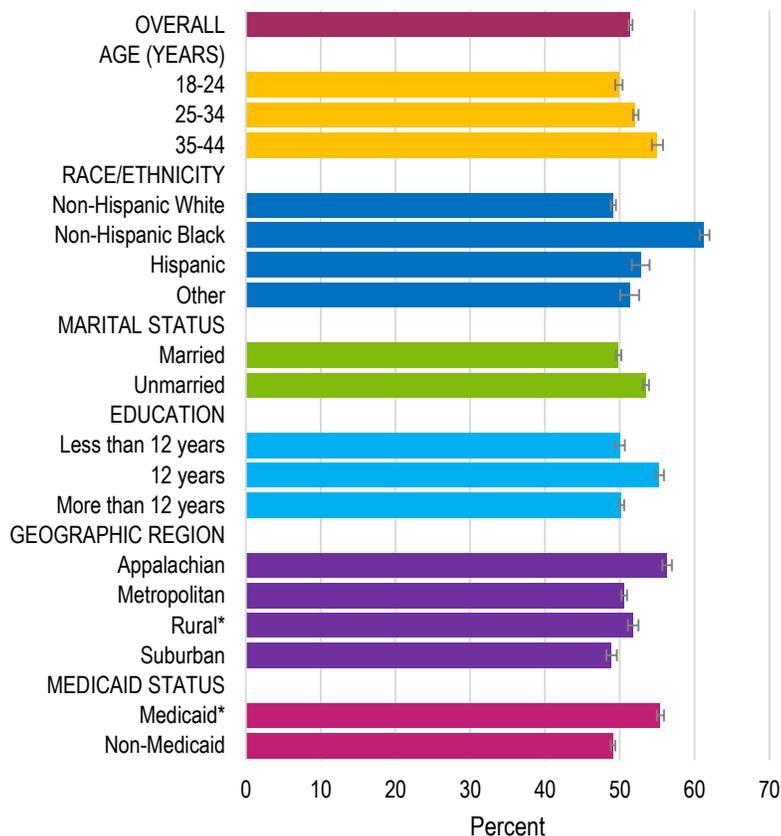
Adverse infant outcomes include:

- Preterm delivery
- High birth weight
- Congenital anomalies

Preconception Health

is a woman's health before she becomes pregnant. It means knowing how health conditions and risk factors could affect a woman or her unborn baby if she becomes pregnant.

Mothers (18-44 years old) Who Were Overweight or Obese When They Became Pregnant, Ohio, 2013



Source: Ohio Vital Statistics Natality, Ohio Department of Health

More than half (51.4 percent) of new Ohio mothers were overweight or obese when they became pregnant, according to 2013 data from birth certificates.

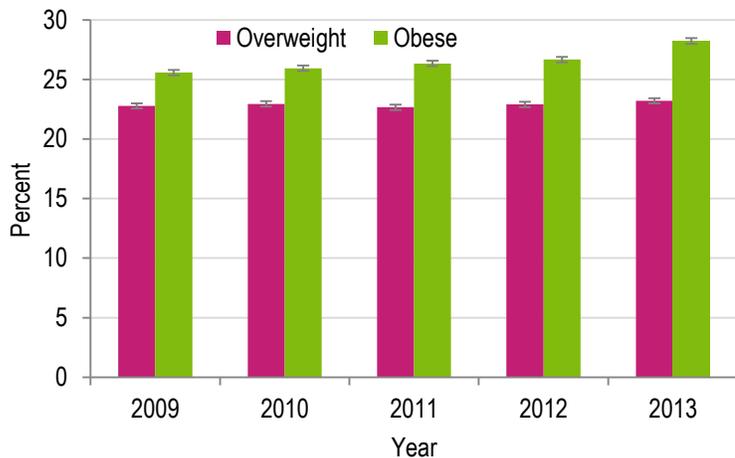
Pre-pregnancy overweight and obesity is high among all women 18-44 years old. However, it increases with age, and the following groups of women were significantly more likely to be overweight or obese when they became pregnant:

- Non-Hispanic black (compared to all other race/ethnicity groups)
- Unmarried (compared to married)
- 12 years of education (compared to more or less education)
- Residents of Appalachian counties (compared to all other geographic regions)
- Medicaid recipients (compared to women not insured by Medicaid)

Prevention

Overweight and obesity are primarily prevented through living a healthy lifestyle, including adequate physical activity and healthy eating. Reproductive-age women should be counseled during regular health care visits about healthy weight. In addition to individual counseling, healthy living can be facilitated through supportive policies, systems, and environments, such as walking and biking infrastructure, and healthy food options in the community.

Ohio Mothers Aged 18-44 Who Were Overweight or Obese When They Became Pregnant, 2009-2013



Source: Vital Statistics Natality, Ohio Department of Health

Pre-Pregnancy Obesity is Increasing

National data has shown increases in population overweight and obesity over time, including both pre-pregnancy obesity and obesity among women of reproductive age. This holds true for Ohio where pre-pregnancy obesity significantly increased from 25.6 percent in 2009 to 28.2 percent in 2013. Pre-pregnancy overweight did not change meaningfully over this same time period (22.8 percent in 2009 and 23.2 percent in 2013).

Resources

- BMI calculator: http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/english_bmi_calculator/bmi_calculator.html
- Obesity prevention resources: <http://www.cdc.gov/obesity/>
- Before, between and beyond pregnancy: <http://beforeandbeyond.org/>

What is Being Done to Reduce Pre-Pregnancy Overweight and Obesity in Ohio?

Reducing obesity across the lifespan is one of the Ohio Department of Health's (ODH) strategic priorities. Below are several of the ways in which ODH is working to reduce pre-pregnancy overweight and obesity.

- ✓ The 5As for Healthy Weight Program, a collaboration between Ohio Connections for Children with Special Needs and the Reproductive Health and Wellness Program (RHWP), is conducted in seven ODH-funded RHWP Clinics around the state of Ohio. The program trains staff in the 5As model and motivational interviewing techniques and has locally-determined supports including local gym access, healthy cooking demonstrations, support groups, and one-on-one consultation.
- ✓ Women Infants and Children Supplemental Nutrition Program (WIC) counsels prenatal and postpartum women on healthy food choices, meals on a budget, increasing activity, and appropriate feeding practices for infants and children. WIC also provides nutritious foods and refers women to other local healthcare partners for individual needs.
- ✓ Through the Creating Healthy Communities (CHC) Program, ODH funds 23 counties to support implementation of population-wide and priority approaches to prevent obesity and chronic disease and reduce health disparities among adults in vulnerable communities. CHC is increasing access to fruits and vegetables and healthy options in low-income neighborhoods through expanding electronic benefits transfer (EBT) usage at farmers markets, providing fresh fruits and vegetables in corner convenience stores, expanding community and school gardens, and promoting healthy options in vending machines in worksites. The CHC Program is also increasing access to physical activity opportunities by building multi-use trails, making communities bike- and pedestrian-friendly, building or refurbishing playgrounds, and adopting shared-use policies for schools and churches to expand the use of their gymnasiums, tracks, and playgrounds for public use.

***Data Notes:** Mothers on Medicaid include those that reported having Medicaid for health care coverage during any of the following three time periods: in the month before pregnancy, for prenatal care visits, or for delivery. Grey bars within figures represent 95% confidence intervals (CI). The width of the CI gives us an idea of how certain we are about the true prevalence. The 95% CI means that if we were to repeat this study 100 times, 95 of the intervals generated would contain the true estimate. "Rural" does not include Appalachian counties as designated by the Appalachian Regional Commission.

References:

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- Honein MA, Devine O, Sharma AJ, Rasmussen SA, Park S, Kucik JE, Boyle C. Modeling the potential public health impact of prepregnancy obesity on adverse fetal and infant outcomes. *Obesity* 2013;21(6):1276-1283. Doi: 10.1002/oby.20156.
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Data Contact: Connie Geidenberger
Connie.Geidenberger@odh.ohio.gov

Program Contact: Lori Deacon
Lori.Deacon@odh.ohio.gov

www.odh.ohio.gov



Ohio
Department of Health