2014 BRFSS survey found that **16.5%** of women in NC report current tobacco use.

- Proportion is higher among low-income women, women with less than a college education, and rural women.

Percentage

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Almost 1 in 10 babies in NC are born to women reporting tobacco use during pregnancy
- In some counties over 30% of babies are born to women who used tobacco
- Among low-income families and in rural areas, proportion is significantly higher than the state average

Progress has been made, but not fast enough
- 2011 = 10.9%
- 2012 = 10.6%
- 2013 = 10.3%
- 2014 = 9.8%
Tobacco Use Causes Poor Birth & Infant Outcomes

Maternal/Fetal Harm From Tobacco
- Infertility
- Miscarriage
- Ectopic Pregnancy
- Premature Birth
- Low Birth Weight
- Stillbirth
- SIDS

Infant/Child Harm From Tobacco
- SIDS
- Ear infections
- Respiratory Infections
- Asthma
- Links with childhood obesity, cancer, & attention disorders, and cardiovascular disease & diabetes in adulthood

Tobacco use during pregnancy is directly associated with the top 4 causes of infant mortality in NC
Prenatal Tobacco Use & Neonatal Abstinence Syndrome (NAS)

- NAS increased 511% between 2004-2012 in NC
  - From 104.4 to 637.9 per 100,000 live births

- 70-90% of pregnant women in substance abuse treatment also use tobacco

- Heavier smoking among opioid-maintained women is associated with lower birth weight and smaller birth length

- Dose-response between the daily number of cigarettes smoked and the severity of NAS, including:
  - total amount of morphine needed to treat NAS,
  - number of days medicated for NAS,
  - neonatal length of hospital stay in days, and
  - is negatively associated with 1- and 5-min Apgar scores

ENDS & Reproductive Age Women

- Not currently regulated and have not been shown to be a safe or effective cessation aid
- The health effects of using e-cigarettes & other ENDS before or during pregnancy have not been adequately studied
  - Nicotine is a known reproductive toxicant and has adverse effects on fetal development, including lung and brain development
  - The use of smokeless tobacco products, such as snus, during pregnancy has been associated with preterm delivery, stillbirth, and infant apnea

ENDS and Children & Youth


Tobacco Use Affects NC Economically

<table>
<thead>
<tr>
<th>Annual health care costs in North Carolina directly caused by smoking</th>
<th>$3.81 billion</th>
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<td>Portion covered by the NC Medicaid program</td>
<td>$931.4 million</td>
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<td>Residents' state &amp; federal tax burden from smoking-caused government expenditures</td>
<td>$889 per household</td>
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<tr>
<td>Smoking-caused productivity losses in North Carolina</td>
<td>$4.24 billion</td>
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</tbody>
</table>

These amounts do not include health costs caused by exposure to secondhand smoke, smoking-caused fires, smokeless tobacco use, or cigar and pipe smoking.

Tobacco use also imposes additional costs, such as damage to property.

Tobacco Cessation is Cost Effective

- Quitting smoking can lower total health care costs within 2 years
  - Cessation treatment in the outpatient setting lowers health care costs within 18 months of quitting.
  - Within 3 years, a former smoker’s health care costs will be at least 10% less than if they continued smoking.

- Tobacco screening is estimated to result in lifetime savings of $9,800 per person

Compared to other preventive health interventions, tobacco cessation has one of the lowest costs per life-year-saved.

For every $1 invested in tobacco cessation for pregnant women, at least $3 are saved in healthcare costs.

What is NC Doing to Protect Moms & Babies?

- **Cessation Support**
  - QuitlineNC
  - Key component of care management for Medicaid-insured pregnant women through the Pregnancy Medical Home Initiative

- **E-cigarettes & other ENDS**
  - NC one of 16 states requiring child-proof liquid nicotine packaging
  - E-cigarettes classified as a tobacco product and not for sale <18 yrs.

- **System Supports**
  - Medicaid & private insurers reimburse for cessation counseling
  - Provider training and TA through You Quit, Two Quit *(funded by Duke Endowment through 6/2016)*
  - Title V Performance Measure
  - Evidence-based cessation counseling required in local health departments
  - Women and Tobacco Coalition for Health (WATCH)
    - Nationally-recognized Guide for Counseling Women Who Smoke
Ensure Clinicians & Community Health Workers Provide Comprehensive Tobacco Cessation for Women

- Support and expand efforts of You Quit, Two Quit
  - Nationally-recognized, evidence-based quality improvement initiative
  - Provides high-quality provider education and office-based technical assistance to improve tobacco screening and treatment
    - Teaches evidence-based approaches to helping pregnant & postpartum women quit tobacco
    - Provides academic detailing to improve office flow, documentation, and clinic-based evaluation
    - Works with wide variety of obstetric and primary care providers, including private practices, health departments, federally-qualified and rural health centers, and residency clinics

- What is needed? $250,000/year for 3 years
Questions?

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