2018
Secondhand Smoke Exposure
Among Youth in Georgia

Georgia Tobacco Use Prevention Program
dph.ga.gov/tobacco

DPH
Georgia Department of Public Health

Acknowledgements

Georgia Department of Public Health
J. Patrick O'Neal, MD
Commissioner

Health Protection
J. Patrick O'Neal, MD
Director

Epidemiology Program
Cherie L. Drenzek, DVM, MS
State Epidemiologist

Chronic Disease, Health Behaviors and Injury Epidemiology Section
Rana Bayakly, MPH
Chief Epidemiologist

Tobacco Use Epidemiology
Alina Chung, MPH
Epidemiologist

Chronic Disease Prevention Section
Kia Toodle, BS
Chronic Disease Prevention Director

Tobacco Use Prevention Program
Kenneth Ray, MPH
Deputy Director

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For more information on tobacco surveillance in Georgia, please contact:

Tobacco Epidemiologist
Chronic Disease, Health Behaviors and Injury Epidemiology Section
Division of Health Protection
Georgia Department of Public Health
2 Peachtree Street NW, 14th Floor
Atlanta, GA 30303-3142
(404) 657-2588
http://dph.georgia.gov/georgia-tobacco-use-surveillance

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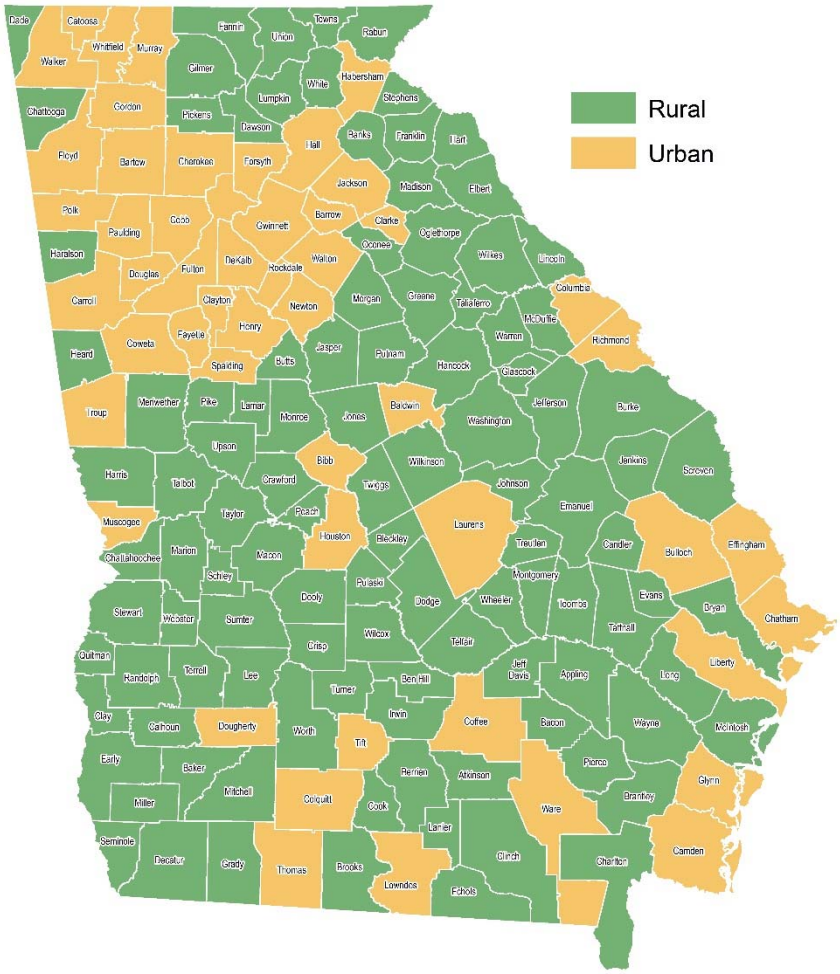
Youth Tobacco Survey

Overview: The Georgia Youth Tobacco Survey (GA-YTS) is a survey conducted in conjunction with the Georgia Youth Risk Behavior Survey (GA-YRBS) in public high schools (HS). The GA-YTS has been conducted every odd year since 2009. The GA-YTS provides comprehensive data about various tobacco-related topics from HS students in the state. In 2017, GA Department of Public Health (DPH) oversampled rural counties so that data can be analyzed by urban/rural geographic distribution. Rural counties were defined as counties with less than or equal to ≤ 35,000 residents. Georgia had a total of 51 urban counties and 130 rural counties (Map 1). Overall, 40 Georgia public HS (2,614 students) were sampled; of these, 26 were urban (1,373 students) and 14 were rural (1,241 students) public HS. The overall response rate was 68.3%.

Methods: Similar to the GA-YRBS, a two-stage cluster sample design was used to produce a representative sample of students in grades 9-12 in Georgia. In the first stage, HS were selected randomly within the grade range specified with a probability proportional to enrollment size. In the second stage, classes were randomly selected from within the selected HS and all the students within a selected class were surveyed. The GA-YTS data were weighted to adjust for any unequal probabilities of selection, nonresponse, and disproportionate selection of different population groups. Results from the GA-YTS can be used to make inferences about tobacco use risk behaviors among all public HS students in Georgia.

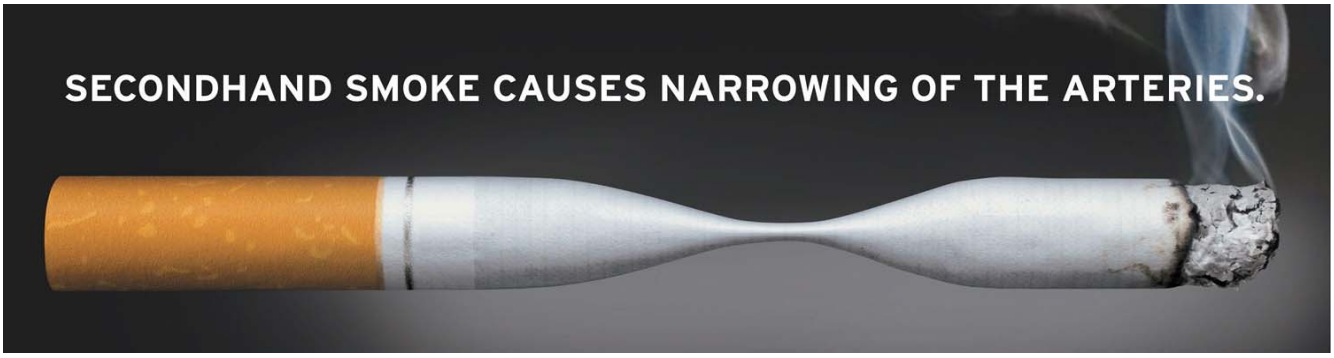
Questionnaire: Topics included, but were not limited to, tobacco use such as cigarettes, cigars, chewing tobacco, hookah, and electronic cigarettes (e-cigarettes), access to tobacco products, smoking cessation, secondhand smoke exposure, knowledge and attitudes about tobacco, social influences for tobacco use, exposure to tobacco products in the media and the internet, diagnosis of asthma, and understanding of 100% tobacco-free school policies.

Map 1. Rural/Urban Counties in Georgia



Definition: What is Secondhand Smoke[1, 2, 3]?

- Secondhand smoke is smoke from burning tobacco products, such as cigarettes, cigars, or pipes.
- Secondhand smoke also is smoke that has been exhaled, or breathed out, by the person smoking.
- Tobacco smoke contains more than 7,000 chemicals, including hundreds that are toxic and about 70 can cause cancer.
- There is no risk-free level of secondhand smoke exposure; even brief exposure can be harmful to health.
- Since 1964, approximately 2,500,000 nonsmokers have died from health problems caused by exposure to secondhand smoke.
- In children, secondhand smoke causes the following:
    - ✓ Ear infections
    - ✓ More frequent and severe asthma attacks
    - ✓ Respiratory symptoms (for example, coughing, sneezing, and shortness of breath)
    - ✓ Respiratory infections (bronchitis and pneumonia)
    - ✓ A greater risk for sudden infant death syndrome (SIDS)



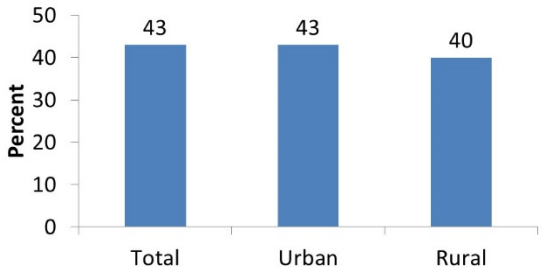
Secondhand Smoke Exposure in Georgia

Most HS students (83.2%; 368,000) believed that all tobacco products are dangerous.

Two out of five HS students (43.2%; 193,000) stated that they had been exposed to secondhand smoke during the past 7 days (Figure 1).

More HS students residing in urban counties were exposed to secondhand smoke (43.1%; 165,000) than in rural counties (39.6%; 32,000) (Figure 1).

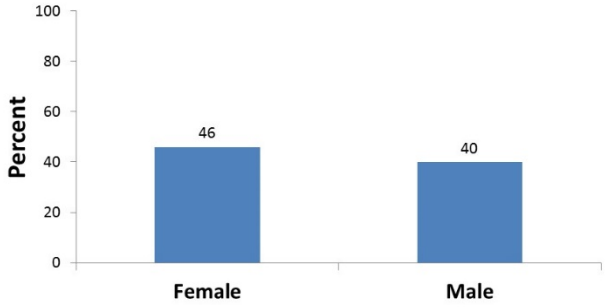
Figure 1. Percentage of High School Students who were Exposed to Secondhand Smoke, by Urban/Rural, Georgia, 2017



Data Source: 2017 Youth Tobacco Survey (YTS)

More female HS students (46.2%; 103,000) said they had someone smoke tobacco products near them than males (39.6%; 86,000) (Figure 2).

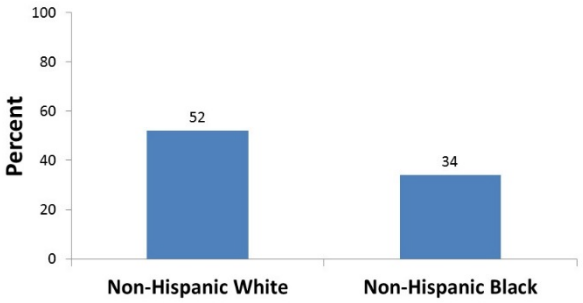
Figure 2. Percentage of High School Students who were Exposed to Secondhand Smoke, by Sex, Georgia, 2017



Non-Hispanic White HS students (51.9%; 102,000) were significantly more likely to be exposed to secondhand smoke than non-Hispanic Black students (34.3%; 56,000) (Figure 3).

In addition, a higher percentage of the HS cigarette smokers (86.1%; 29,500) said they had been exposed to secondhand smoke than the e-cigarette smokers (78.3%; 41,500).

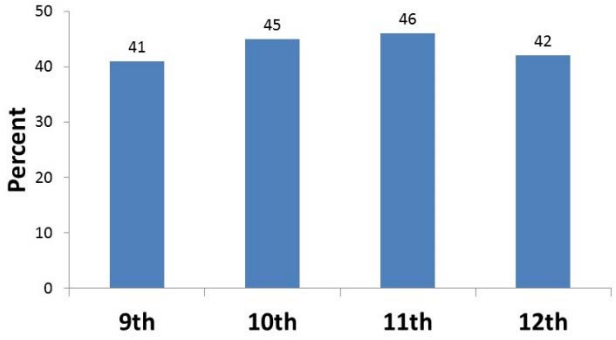
Figure 3. Percentage of High School Students who were Exposed to Secondhand Smoke, by Race/Ethnicity, Georgia, 2017



Percentages of secondhand smoke exposure did not differ by grade level (Figure 4):

- 9th grade (40.6%; 36,000)
- 10th grade (44.7%; 51,000)
- 11th grade (46.4%; 46,500)
- 12th grade (41.8%; 41,500)

Figure 4. Percentage of High School Students who were Exposed to Secondhand Smoke, by Grade, Georgia, 2017



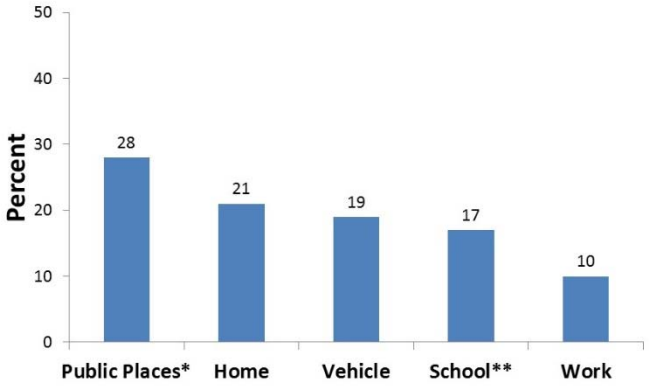
Data Source: 2017 Youth Tobacco Survey (YTS)

Secondhand smoke harms youth, and the only way to fully protect nonsmokers is to eliminate smoking in all homes, worksites, and public places.[1]

Georgia HS students stated that they were mostly exposed to secondhand smoke in the following places (Figure 5):

- Public Places* (28.2%; 124,000)
- Home (21.0%; 95,000)
- Vehicle (19.3%; 85,500)
- School** (17.3%; 76,000)
- Work (9.6%; 42,000)

Figure 5. Percentage of High School Students who were Exposed to Secondhand Smoke, by Location, Georgia, 2017



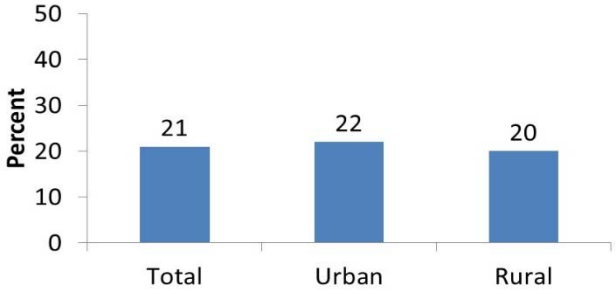
*Public places include indoor/outdoor public places such as stores, restaurants, and sports arenas.
**School includes school buildings, grounds, and parking lots.

Home Rules

Almost one in five Georgia HS students (21.0%; 95,000) said that they had someone smoke tobacco products in their home (not counting decks, garages, or porches) (Figure 6).

In urban counties, more HS students (21.7%; 82,000) were exposed to secondhand smoke at home than HS students in rural counties (19.7%; 16,000) (Figure 6).

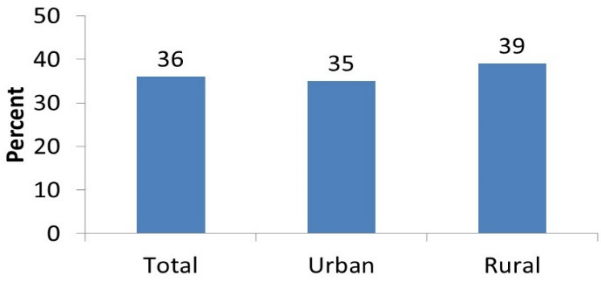
Figure 6. Percentage of High School Students who were Exposed to Secondhand Smoke at Home, by Urban/Rural, Georgia, 2017



Also, 35.6% (156,000) of Georgia HS students said that they lived with any type of tobacco users, including someone using smokeless tobacco, cigars, hookah or waterpipe, and e-cigarette at home (Figure 7).

More HS students residing in *rural* counties were likely to live with tobacco users at home (38.9%; 30,500) than in urban counties (34.9%; 123,000) (Figure 7).

Figure 7. Percentage of High School Students who Lived with Tobacco User at Home, by Urban/Rural, Georgia, 2017



Data Source: 2017 Youth Tobacco Survey (YTS)

HS cigarette smokers (74.7%; 25,000) were more likely to live with tobacco users at home than non-smokers (32.2%; 129,000).

Among Georgia HS students, more non-Hispanic White students (44.2%; 86,500) lived with someone who used tobacco products at home than non-Hispanic Black students (25.9%; 41,000) (Figure 8).

In Georgia, 23.0% (10,000) of HS students said that they lived with a sibling or someone aged 0-5 years old at home.

Based on the World Health Organization (WHO) findings, Children exposed to secondhand smoke are at a 50 to 100% higher risk of acute respiratory illness.

Among GA HS smokers, 35.3% (11,500) said that they lived with a sibling or someone aged 0-5 years old at home. Also, 25.2% (25,000) were allowed to smoke at home when a child was around.

Non-Hispanic Black HS smokers living with tobacco users (33.7%; 13,400) were more likely to allow smoking with a child at home than non-Hispanic White HS smokers (30.1%; 25,500) (Figure 9).

More current HS cigarette smokers (43.9%; 21,000) reported that smoking tobacco products were allowed inside their home than non-cigarette smokers (17.3%: 70,000) (Figure 10).

Also, a higher percentage of current HS electronic cigarette (e-cigarette) smokers (40.9%; 21,000) reported that smoking tobacco products were allowed inside their home than non-e-cigarette smokers (16.1%: 61,500).

Figure 8. Percentage of High School Students who Lived with Tobacco User at home, by Race/Ethnicity, Georgia, 2017

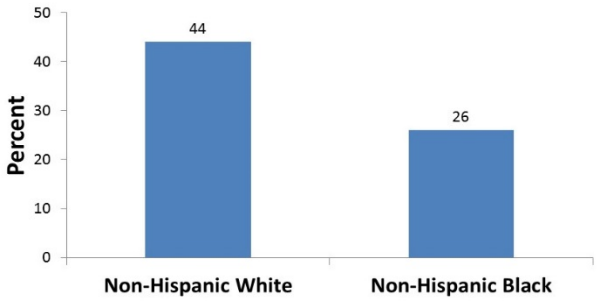


Figure 9. Percentage of High School Students who Lived with Tobacco User with a Child, by Race/Ethnicity, Georgia, 2017

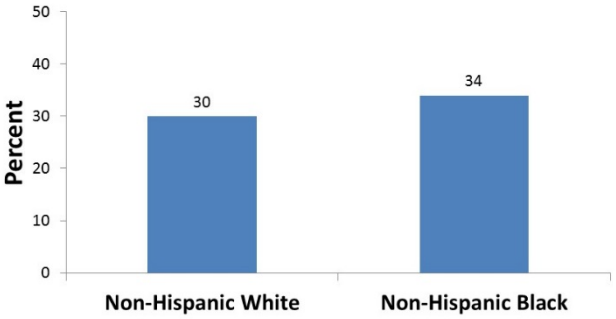
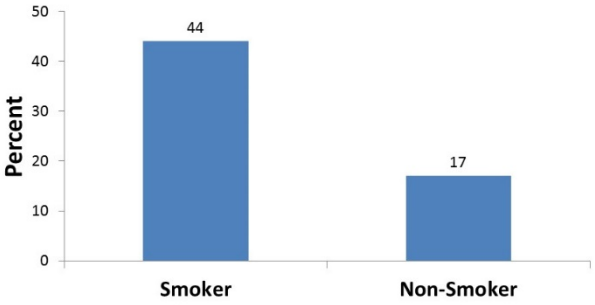


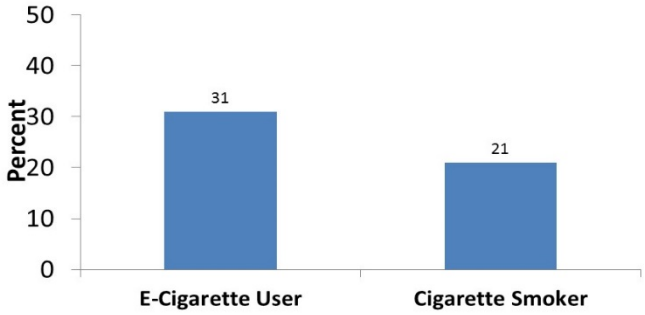
Figure 10. Percentage of High School Students who were Allowed to Smoke inside Home, by Smoking Status, Georgia, 2017



Data Source: 2017 Youth Tobacco Survey (YTS)

Moreover, more current HS e-cigarette users (30.5%; 28,000) believed that smoking tobacco products should be allowed inside their home than cigarette smokers (21.0%: 19,500) (Figure 11).

Figure 11. Percentage of High School Students who were Allowed to Smoke inside Home, by E-Cigarette/Cigarette Smoker, Georgia, 2017

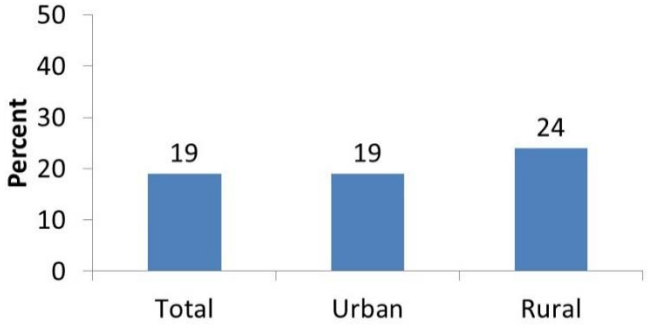


Vehicle Rules

Among Georgia HS students, 19.3% (85,500) said that they had been in a vehicle when someone was smoking a tobacco product (Figure 12).

In rural counties, more HS students (24.3%; 19,500) were exposed to secondhand smoke in a vehicle than HS students living in urban counties (19.0%; 71,500) (Figure 12).

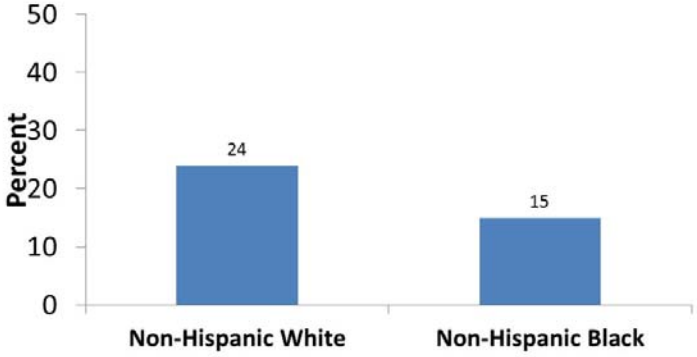
Figure 12. Percentage of High School Students who were Exposed to the Secondhand Smoke in Vehicle, by Urban/Rural, Georgia, 2017



A similar percentage of female HS students (19.8%; 44,000) stated that they had someone smoking a tobacco product while they were in a vehicle as male HS students (19.0%; 40,900).

More non-Hispanic White students (24.0%; 45,500) stated that they were exposed to secondhand smoke in a vehicle than non-Hispanic Black students (15.4%; 25,000) (Figure 13).

Figure 13. Percentage of High School Students who were Exposed to the Secondhand Smoke in Vehicle, by Race/Ethnicity, Georgia, 2017



Data Source: 2017 Youth Tobacco Survey (YTS)

One in five HS students (21.2%; 25,000) said that smoking was allowed in the vehicles that they or their family members own or leased.

There is no risk-free level of exposure to secondhand smoke. Secondhand smoke causes numerous health problems in infants and children, including more frequent and severe asthma attacks, respiratory infections, ear infections, and sudden infant death syndrome (SIDS).[1]

Among GA HS students who smoked, 31.4% (31,000) were allowed to smoke in a vehicle when a child aged 0-5 years old was around.

Among HS students who smoked, a higher percentage of students living in urban counties (50.8%; 14,000) were allowed to smoke in a vehicle than students living in rural counties (48.6%; 4,100) (Figure 14).

Non-Hispanic White smokers (23.9%; 47,000) were more likely to allow smoking in a vehicle than non-Hispanic Black smokers (17.4%; 28,000).

More current HS e-cigarette users (30.3%; 27,000) believed that smoking tobacco products should be allowed in vehicles than those HS students who smoke cigarettes (19.3%: 17,500) (Figure 15).

Multi-Unit Housing Rules

Only 3.3% (14,500) of Georgia HS students living in multi-unit housing, including but not limited to an apartment, duplex, townhouse, and/or condominium said that they knew whether their housing had a tobacco-free policy (Figure 16).

Larger number of students reported they were not sure about their multi-unit housing had a tobacco-free policy (17.9%; 79,000) where 11.8% (52,500) said they believed there was no tobacco-free policy existed (Figure 16).

Figure 14. Percentage of High School Students who were Allowed to Smoke in Vehicle, by Urban/Rural, Georgia, 2017

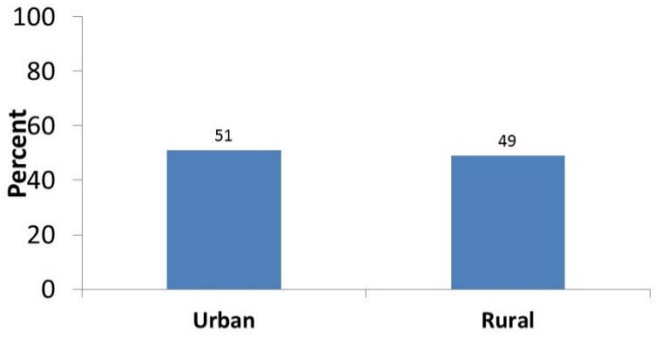


Figure 15. Percentage of High School Students Believing that Smoking Should be Allowed in Vehicle, by Smoking Status, Georgia, 2017

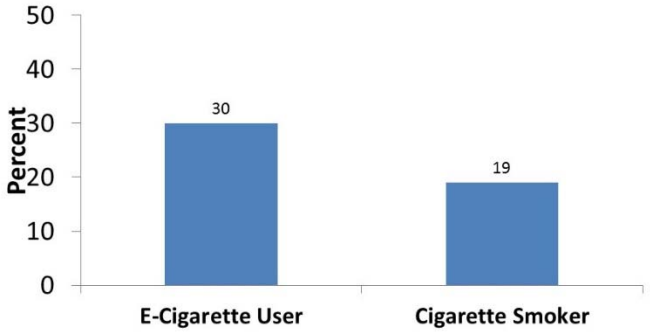
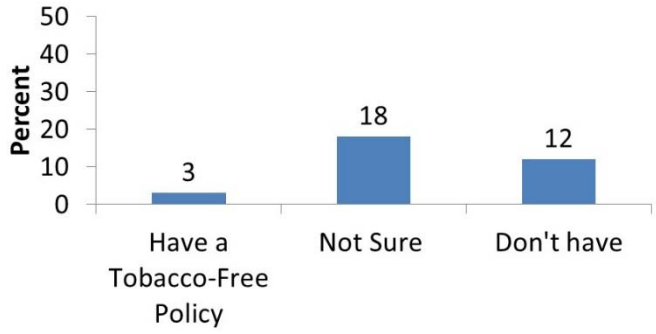


Figure 16. Percentage of High School Students who Know Whether Their Multi-Unit Housing Has a Tobacco-Free Policy, Georgia, 2017

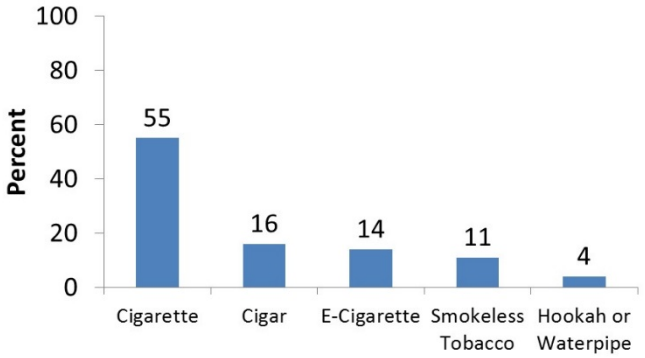


Data Source: 2017 Youth Tobacco Survey (YTS)

More than half (54.6%; 20,000) of Georgia HS students living in a multi-unit housing lived with family members who use cigarettes. Additionally, HS students stated that they lived with family members that use other tobacco products such as (Figure 17):

- Cigar, cigarillos, or little cigars such as Black and Milds, Swisher Sweets, Dutch Master, White Owl, or Phillies Blunts, (15.8%; 5,800)
- E-Cigarettes (13.9%; 5,100)
- Smokeless tobacco, chewing tobacco, snuff, or dip such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen (11.3%; 4,200)
- Hookah or Waterpipe (4.3%; 1,600)

Figure 17. Percentage of High School Students who live in Multi-Unit Housing, by Tobacco Products Used at Home, Georgia, 2017



Asthma and School Absenteeism

Asthma is a leading chronic illness among youth in the United States and a leading cause of school absenteeism[1].

Among Georgia HS students, 13.0% (46,000) said they had asthma (Figure 18).

A higher percentage of female HS students (16.4%; 31,000) had asthma than male HS students (9.1%; 15,000) in Georgia (Figure 18).

More non-Hispanic Black students (14.8%; 18,500) had asthma than non-Hispanic White students (12.1%; 19,500).

HS students who were cigarette smokers (15.9%; 3,800) were more likely to have asthma than HS non-smokers (12.9%; 42,500) (Figure 19).

Figure 18. Percentage of High School Students who have Asthma, by Sex, Georgia, 2017

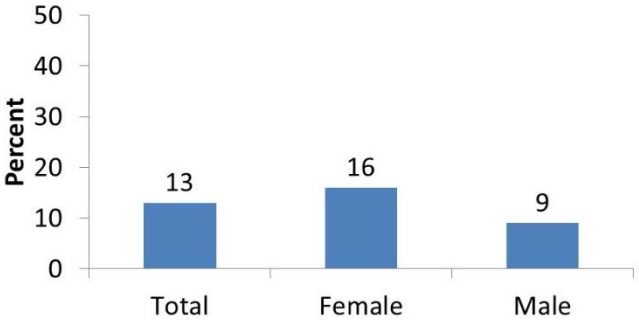
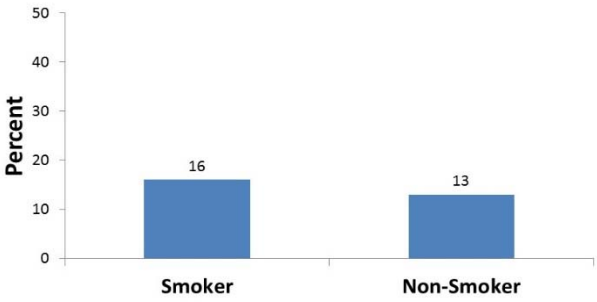


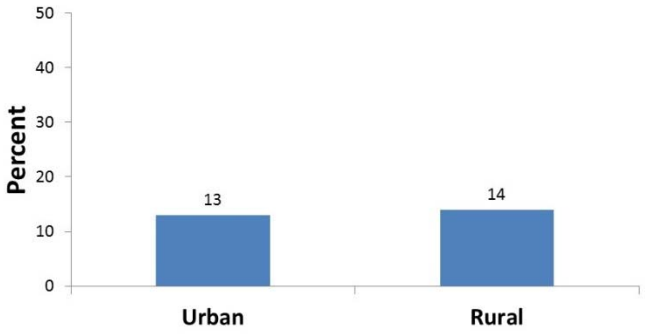
Figure 19. Percentage of High School Students who have Asthma, by Smoking Status, Georgia, 2017



Data Source: 2017 Youth Tobacco Survey (YTS)

HS students living in rural counties in Georgia had asthma (14.2%; 8,800) more frequently than HS students in living urban counties (12.7%; 38,500) (Figure 20).

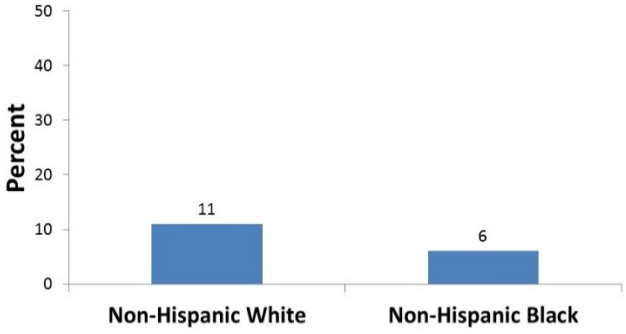
Figure 20. Percentage of High School Students who have Asthma, by Urban/Rural, Georgia, 2017



At school, 8.8% (39,000) of HS students believed that secondhand smoke exposure may have caused asthma-related symptoms on campus, while riding a bus, or at an after-school event (Figure 21).

More non-Hispanic White students (10.5%; 20,600) believed that secondhand smoke exposure may have caused their asthma than non-Hispanic Black students (6.1%; 9,700) (Figure 21).

Figure 21. Percentage of High School Students who believed Secondhand Smoke Exposure caused Asthma, by Race/Ethnicity, Georgia, 2017

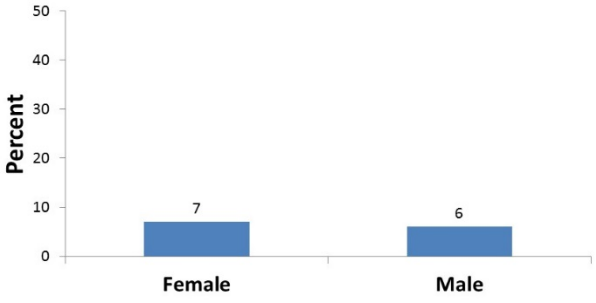


Among Georgia HS students, 7.0% (31,000) said they were ever absent from school due to asthma-related symptoms (Figure 22).

More female HS students (7.1%; 15,500) were ever absent from school due to asthma-related symptoms than male HS students (6.0%; 13,500) in Georgia (Figure 22).

More non-Hispanic White students (7.1%; 14,000) were ever absent due to asthma-related symptoms than non-Hispanic Black students (5.4%; 8,600).

Figure 22. Percentage of High School Students who were Ever Absent from School due to Asthma, by Sex, Georgia, 2017



Data Source: 2017 Youth Tobacco Survey (YTS)

References:

1. HHS, E-Cigarette Use among Youth and Young Adults. A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.

2. Institute of Medicine. Secondhand Smoke Exposure and Cardiovascular Effects: Making Sense of the Evidence. Washington: National Academy of Sciences, Institute of Medicine, 2009.

3. National Toxicology Program. Report on Carcinogens, Fourteenth Edition. Research Triangle Park (NC): U.S. Department of Health and Human Services, Public Health Service, 2016

Ask Your Georgia Health Care Provider about Georgia cAARds

Referring to the Georgia Tobacco Quitline (GTQL):
Georgia cAARds Program: Ask, Advise, and Refer with with Follow-up:

- ***Ask*** all patients about tobacco use during each visit
- ***Advise*** them about the benefits of tobacco cessation
- ***Refer*** them to the Georgia Tobacco Quit Line for a free "Quit Kit", individualized plan and behavioral counseling : *1-877-270- STOP*
- *Complete* the Georgia Tobacco Quit Line fax Referral Form with the patient
    - ✓ *GTQL Fax Referral Form can be downloaded from DPH's website*
- *Inform* the patient they will be contacted by a Georgia Tobacco Quit Like staff member within 48 hours or less

Georgia Tobacco Quit Line: 1-877-270-STOP (7867)

Georgia Spanish Line: 1-877 2NO-FUME (66-3863)

Hearing Impaired: 1-877-777-6534

Open 24 hours/ 7 days a week