

# **HEALTH BEHAVIORS FACT SHEET: Smoking in Cars**

October 2017

Figure 1: Percentage of Adults who Smoke in Cattaraugus County Change over Time—Age Adjusted<sup>1</sup>

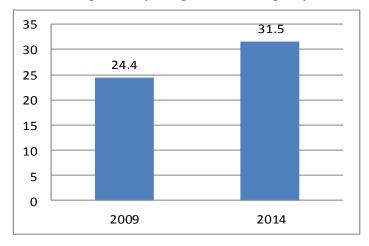
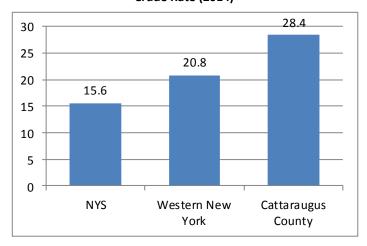


Figure 2: Percentage of Adults who Smoke —
Crude Rate (2014) <sup>2</sup>





## Times certainly have changed....

For those who grew up in the 80's and 90's, you likely remember the time when you were asked if you would like to sit at a smoking or non-smoking table before being seated at a restaurant. If you lived with a non-smoking family, undoubtedly you remember having to shower and wash your clothes after returning from a night out at the bingo hall, bowling alley, or bar. Thankfully times have changed. People are prohibited from smoking in most public places, including restaurants, bars, and bingo halls. Even with all of the progress that have been made to keep our environments smoke free tobacco use and second hand smoke continue to be a public health concern.

Plenty of research has shown the dangerous effects of smoking and second hand smoke exposure. This research has led to legislation including New York State's Clean Indoor Air Act prohibiting smoking in public places. These regulations were originally put into place to protect children from exposure to second hand smoke and were expanded to protect the general public, leading to a decrease in the rate of adult smokers across the state. New York State also has the highest excise tax on tobacco in the country, which also can explain the lowering rate. Although there has been a statewide decrease in the number of adult smokers, Cattaraugus County has seen in increase over the past decade.

Cattaraugus County has the highest number adults who smoke in Western New York and ranks third in the state. Currently, 31.5% of adults in Cattaraugus County smoke. The adult smoking rate in the county is also twice as high as the statewide average of 15.9%<sup>1</sup>. Using this data along with U.S. Census data<sup>3</sup>, there is the potential in the very worst case scenario that 70% of children under the age of 18 in Cattaraugus County are exposed to second hand smoke. Any exposure to second hand smoke is unsafe, especially in a car.

#### Cars and Second hand Smoke

In 2014, research was focused on the dangerous effects of second hand smoke exposure while in a car. A car's confined space causes second hand smoke to become more concentrated than in a larger space. Thirty-seconds after a cigarette is lit, the air quality in a car is significantly affected<sup>4</sup>. When the United State Environmental Protection Agency (EPA) measures air quality, it is given a rating

based on the level of health concern. The ratings range from good, moderate, unhealthy for sensitive groups, unhealthy, very unhealthy to hazardous<sup>5</sup>. The air quality in a car, after a person smokes half a cigarette, reaches levels the EPA considers hazardous to everyone<sup>4</sup>.

Some people believe that if car windows are open and the fan is on high this will clear out second hand smoke. This is a common misconception, opening the windows when smoking in a car has little to no effect on air quality.

Since 2006, several states and communities have banned smoking in a car with a child: Arkansas, California, Louisiana, Maine, Utah, Vermont, Virginia, and Puerto Rico. If we are going to take steps to make sure our children are secured safely in the back seat, why are we not proactive when it comes to smoking in a car with a child?

## Second hand Smoke - it's affect on our Children

Second hand smoke affects children more profoundly than adults. Children's lungs are not fully developed and they breathe at a faster rate. This causes them to breathe second hand smoke in deeply into their lungs, reaching and damaging more areas. When a child is exposed to second hand smoke it increases the risk for several health problems:

- Asthma
- Severe asthma attacks
- Middle ear-infections
- Upper and lower respiratory infections
- Wheezing
- Coughing
- Slower recovery from colds and flu
- Tooth decay
- Sudden Infant Death Syndrome (SIDS)<sup>6</sup>

## Third hand Smoke!

If you've ever been in a smoker's car you've may have noticed that it smells even if no one is smoking. New research has found that this is caused by third hand smoke. Third hand smoke is defined as:

- The left-over pollution after a cigarette is put out
- The smoke residue can stick to dust, furniture, carpeting, car seats, hair, or clothes
- Secondhand smoke particles are released into the air, combine with particles normally in the atmosphere (i.e., nitrous acid or ozone) and forms a new compound called nitrosamines, which are released into the air as cancercausing chemicals.<sup>7</sup>

## **Facts about Third Hand Smoke**

- 43% of smokers (65% of nonsmokers) believe that third hand smoke causes harm to children.
- There is no safe level of exposure to tobacco smoke.
- Cars where people have smoked can smell like cigarettes for a long time due to the third hand smoke left on surfaces.
- Opening car windows or turning on the fan does not prevent third hand smoke<sup>7</sup>.

# Tips for a Smoke Free Car

- Do not smoke, ever, in a car that transports children.
   Smoking in your car even once can fill the seats and other materials with toxins, even if the windows are open.
- Remind passengers not to smoke in your car.
- Fill your car's ashtray with spare change so you aren't tempted to fill it with ash.
- Leave a cell phone charger or other device plugged into the car's adapter outlet so you are not tempted to use it as a lighter.
- Store your cigarettes in the trunk or in another out-ofreach area while you drive.
- Consider putting up a sticker or decal on your car that reminds passengers that it is a no smoking vehicle<sup>8</sup>.

#### Resources:

- The Behavioral Risk Factor Surveillance System Brief. Cigarette Smoking New York State Adults. https://www.health.ny.gov/statistics/brfss/reports/docs/ brfssbrief\_smoking\_1603.pdf. Accessed 10/17/2017.
- New York State Department of Health Prevention Agenda Dashboard 2013 2018. Percentage of cigarette smoking adults 2013-2014. https://webbi1.health.ny.gov/SASStoredProcess/guest?\_program=/EBI/PHIG/ apps/dashboard/pa\_dashboard&p=it&ind\_id=pa20\_0. Accessed 10/17/2017.
- US Census Quick Facts. https://www.census.gov/quickfacts/fact/table/ cattarauguscountynewyork/AGE295216#viewtop. Accessed 10/17/2017.
- Particulate mass and polycyclic aromatic hydrocarbons exposure from secondhand smoke in the back seat of a vehicle. Northcross AL, Trinh M, Kim J, Jones IA, Meyers MJ, Dempsey DD, Benowitz NL, Hammond SK. Tob Control. 2014 Jan;23(1):14-20. doi: 10.1136/ tobaccocontrol-2012-050531
- 5. Air Quality Index. https://en.wikipedia.org/wiki/Air\_quality\_index. Accessed 10/17/2017
- Health Effects of Second Hand Smoke. https://www.cdc.gov/tobacco/data\_statistics/ fact\_sheets/secondhand\_smoke/health\_effects/index.htm. Accessed 10/17/2017.
- Cigarettes Can Saturate Car's Interior with Toxins, Endangering Health of Children. http:// thenewswheel.com/cigarettes -can-saturate-cars-interior-with-toxins-endangering-healthof-children/ Accessed 10/17/2017
- How Parents Can Prevent Exposure to Thirdhand Smoke. https://www.healthychildren.org/ English/health-issues/conditions/tobacco/Pages/How-Parents-Can-Prevent-Exposure-Thirdhand-Smoke.aspx. Accessed 10/17/17