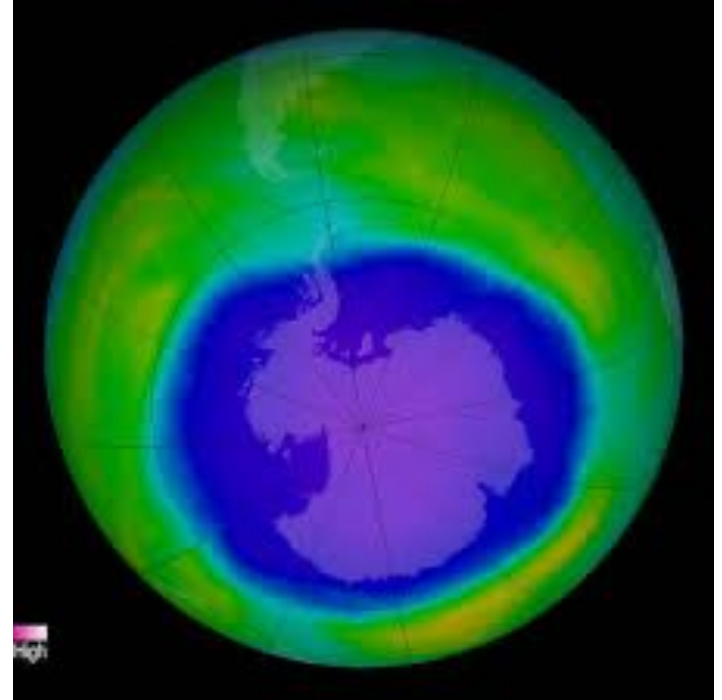


# Does Gas Price Effect Pollution Gas Emissions?

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# Importance

- Cars use fossil fuels and emit gases.
  - A typical passenger vehicle emits about 4.6 metric tons of carbon dioxide per year<sup>1</sup>.
- It is theorized that high gas prices lead to less driving, and therefore less emission.
- Ozone is useful when it is in the atmosphere, but it is harmful at the surface<sup>2</sup>.



- Pollutants affect air quality levels which can cause other health problems.
- As more people have access to cars, this problem will get worse over time  
(Car access levels by year).

AQI Basics for Ozone and Particle Pollution

Daily AQI Color	Levels of Concern	Values of Index	Description of Air Quality
Green	Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.

Estimated worldwide automobile production from 2000 to 2019 (in million vehicles)



Source:  
Statista  
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# Hypothesis

$H_0$ : There is no correlation between gas price and gas emission level.

$H_a$ : There is correlation between gas price and gas emission level.

If p-value is below 0.05, we will reject the null hypothesis and accept the alternative.

# Works Cited

1. <https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>
2. <https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics>