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| Pollutants | Causes | Concerns |
| Ozone | Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents, sunlight | Irritates lungs & airways, causes inflammation, lung damage, asthma, respiratory illnesses, interferes with plants ability to produce & store food, causes diseases in plants, causes harsh weather |
| Particulate Matter | Cars, trucks, buses, factories, construction sites, tilled fields, unpaved roads, stone crushing, burning of wood | Asthma, coughing, painful breathing, chronic bronchitis, decreased lung function, premature death, reduced visibility, acidic lakes & streams, changing nutrient balance, depleting nutrients in soil, damages forests & farm crops, affects diversity of ecosystems |
| Sulfur Dioxide | Fuel burning, extracting gasoline from oil, extracting metals from ore, electric utilities, industrial facilities, locomotives, large ships, non-road diesel equipment | Respiratory illness, aggravate heart disease, difficulty breathing, premature death, reduce visibility, acid rain, damage to forests, crops & soil, acidic lakes & streams |
| Nitrogen Oxide | Motor vehicles, electric utilities, industrial, commercial & residential sources that burn fuels | Asthma, lung diseases, lung damage, damage vegetation, reduce crop yield, acid rain, premature death, upset chemical balance of nutrients, rise in earth’s temperature, biological mutations, reduced visibility |
| Lead | Motor vehicles, industrial sources, metal processing, lead smelters, waste incinerators, utilities, lead-acid battery manufacturers | Damage organs, osteoporosis, reproductive disorders, seizures, mental retardation, behavioral disorders, memory problems, mood changes, high blood pressure, heart disease, affects animals, slows vegetation growth, reproductive damage in fish, neurological changes |
| Carbon Monoxide | Motor vehicle exhaust, non-road engines & vehicles, industrial processes, wood burning, forest fires, woodstoves, gas stoves, cigarette smoke, unvented gas, kerosene space heaters | Cardiovascular effects, vision problems, reduced ability to work or learn, reduced manual dexterity, difficulty performing complex tasks, death, respiratory problems |

2) It is highest in the summer because the hot weather causes ground-level ozone to form in harmful concentrations. Since it is winter, there will not be a lot of ground-level ozone because the temperature is lower than during the summer.

3) The governments of these third world countries are going to need to be concerned about increasing health issues and increasing health care cost associated with these health issues. Also, they are going to have to be concerned about the effects on animals, plants, and fish.

4) The western and northern parts of North Carolina are in non-compliance with the standards of the Clean Air Act.