

HOW TREES IMPACT HEALTH



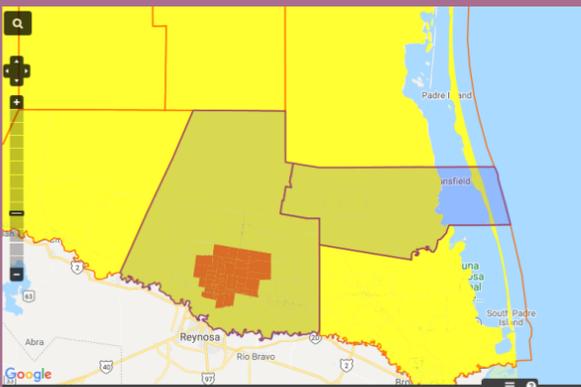
Overall trees help avoid 21 health incidence cases from pollution in Hidalgo county and 4 in Willacy County

AS A RESULT OF TREES:

- There are 9.27 cases avoided of acute respiratory symptoms in Hidalgo and 1.83 in Willacy.
- 6.90 cases of asthma exacerbation have been avoided in the past year in Hidalgo and 0.94 in Willacy.

Trees remove a total of 3,289,548.6 lb/yr of various particulate matter or pollution from the air in the Hidalgo and Willacy counties.

AVERAGE FINE PARTICULATE MATTER IN HIDALGO AND WILLACY COUNTIES



ate Matter (PM2.5) Average

| | |
|--------|--|
| Green | Good [4 thru 6 ($\mu\text{g}/\text{m}^3$)] |
| Yellow | Moderate [7 thru 9 ($\mu\text{g}/\text{m}^3$)] |
| Orange | Unhealthy for Sensitive Groups [10 thru 12 ($\mu\text{g}/\text{m}^3$)] |
| Red | Unhealthy [13 thru 15 ($\mu\text{g}/\text{m}^3$)] |
| Purple | Very Unhealthy [16+ ($\mu\text{g}/\text{m}^3$)] |

age PM2.5 ($\mu\text{g}/\text{m}^3$) value for all days in 2008 from U.S. EPA Downscaler Modal- epa.gov.

HEALTH IMPACT

Fine particulate matter are tiny particles or droplets in the air that are about 30 times smaller than a human hair. Because of their size, these particles can stay longer in the air which raises the possibility of inhaling them. These fine particles can travel to the lungs and cause short-term health effects such as eye, nose, throat and lung irritation, coughing, sneezing, runny nose and shortness of breath.

https://www.health.ny.gov/environmental/indoors/air/pmq_a.htm



Trees also have impacts in mental health issues such as stress and depression; These effects cannot be measured directly, but research has shown that being in contact with nature increases physical activity and social connection, thus improving mental health.

<http://thehealth.usnews.com/wellness/articles/2016-12-09/the-many-health-benefits-of-trees>

WHAT CAN YOU DO?

- **Plant Trees!:** whether it is in your backyard or around your neighborhood, we can all put in our grain of sand when it comes to tree planting.
- **Go outside:** Spending time in nature has shown to boost our mental and physical health.
- **Engage your community:** Unity is power! in the words of famous activist Helen Keller, "Alone we can do so little; together we can do so much".