

CASEY
TREES

AIR
POLLUTION
& TREES

How do DC's trees help us breathe clean air?



HOW DO TREES HELP?

TREES CLEAN OUR AIR

There are harmful, man-made, pollutants that we breathe in, especially in cities, all the time. **They can cause problems like asthma.**



Carbon
Monoxide



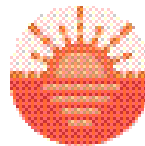
Nitrogen
Dioxide



Sulfur
Dioxide



Particulate
Matter



Ground
Level Ozone

23.4 million people in the U.S. suffer from asthma symptoms

15.5% of D.C. residents have asthma which is above the national average of 13.5%

HOW DO TREES FILTER THESE HARMFUL POLLUTANTS

1 While **particles float around in the air**, their microscopic size enables them to be inhaled deep into our lungs, potentially **causing a temporary irritation or long term serious health problems.**

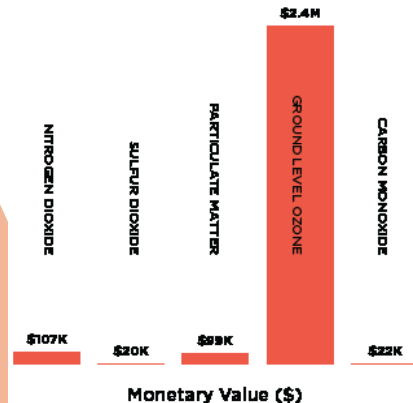
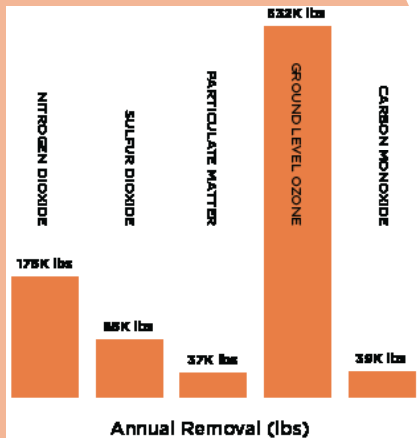
2 **Gaseous pollutants are taken out of the air by trees** primarily through leaf stomata. Stomata are small “windows” on green leaves, which let carbon dioxide in and oxygen out.

3 Once inside the leaf, gases diffuse into available spaces and may be absorbed by the plant.

4 Airborne particles are removed (at least temporarily) from the air by landing on leaf surfaces.

HOW MUCH POLLUTION ARE DC'S TREES TAKING OUT OF THE AIR?

D.C.'s trees removed 870,000 lbs of pollutants.



BIGGER CANOPIES FILTER
MORE POLLUTANTS

WHAT DOES THIS MEAN FOR US?

The nitrogen dioxide removed from trees means there was:



506 less asthma exacerbation incidences
33 less acute respiratory symptoms
2 less hospital visits last year

The ground level ozone removed from trees means there was:



550 less acute respiratory symptom incidences
A reduction of 134 school loss days

The removal of particulate matter accounted for:



418 less acute respiratory symptoms
A reduction of 73 work loss days
1 less death

The annual removal is equivalent to the weight of 217.5 cars



WHAT
CAN
YOU
DO?

SUPPORT OUR EFFORTS
TO PLANT MORE TREES
BY **VOLUNTEERING OR**
DONATING TO CASEY TREES



HOW TO HELP

VOLUNTEER

caseytrees.org/get-involved

BE INFORMED:
READ DC'S
TREE BILL

BECOME
A TREE
ADVOCATE

DONATE TO
CASEY TREES



DON'T CUT
DOWN
TREES IN
YOUR YARD!

CALL 311 IF YOU
SEE A STREET
TREE IN DANGER



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