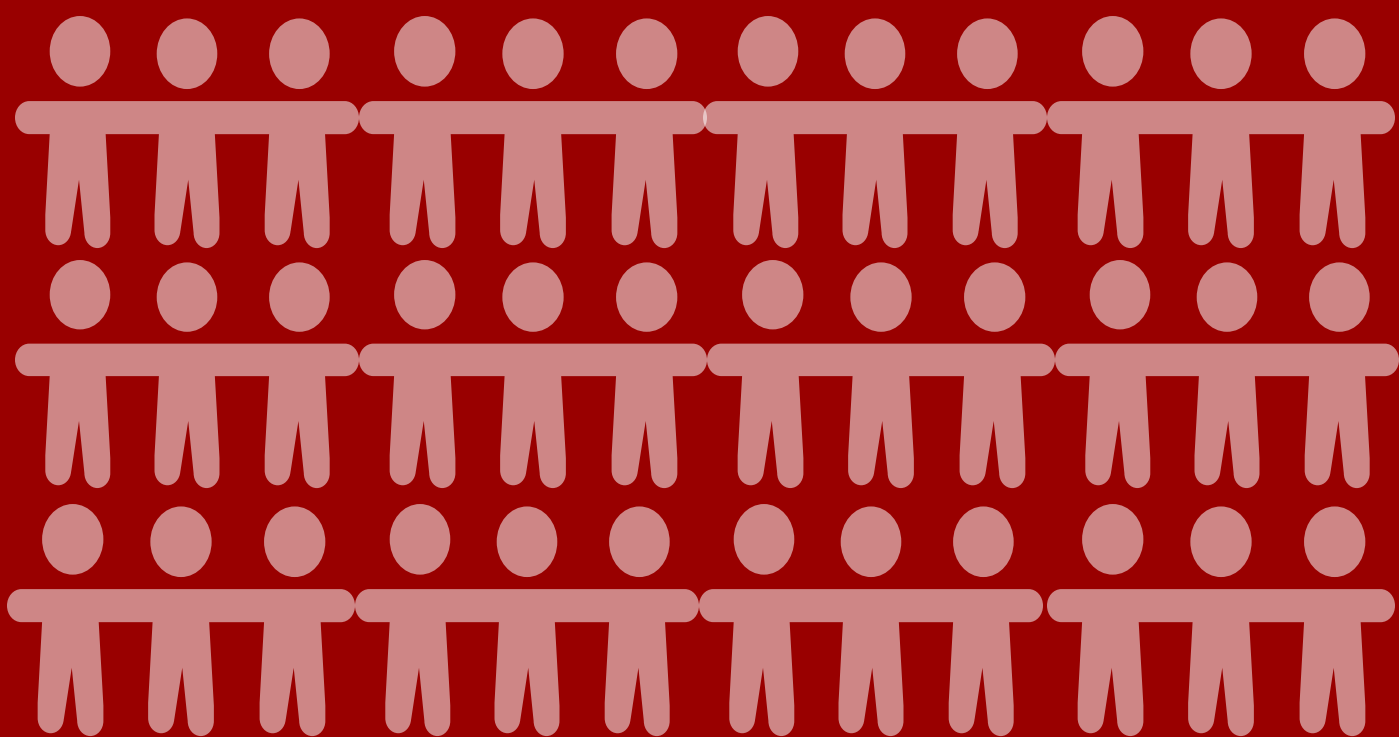


Cleaner Air = Healthier Lungs

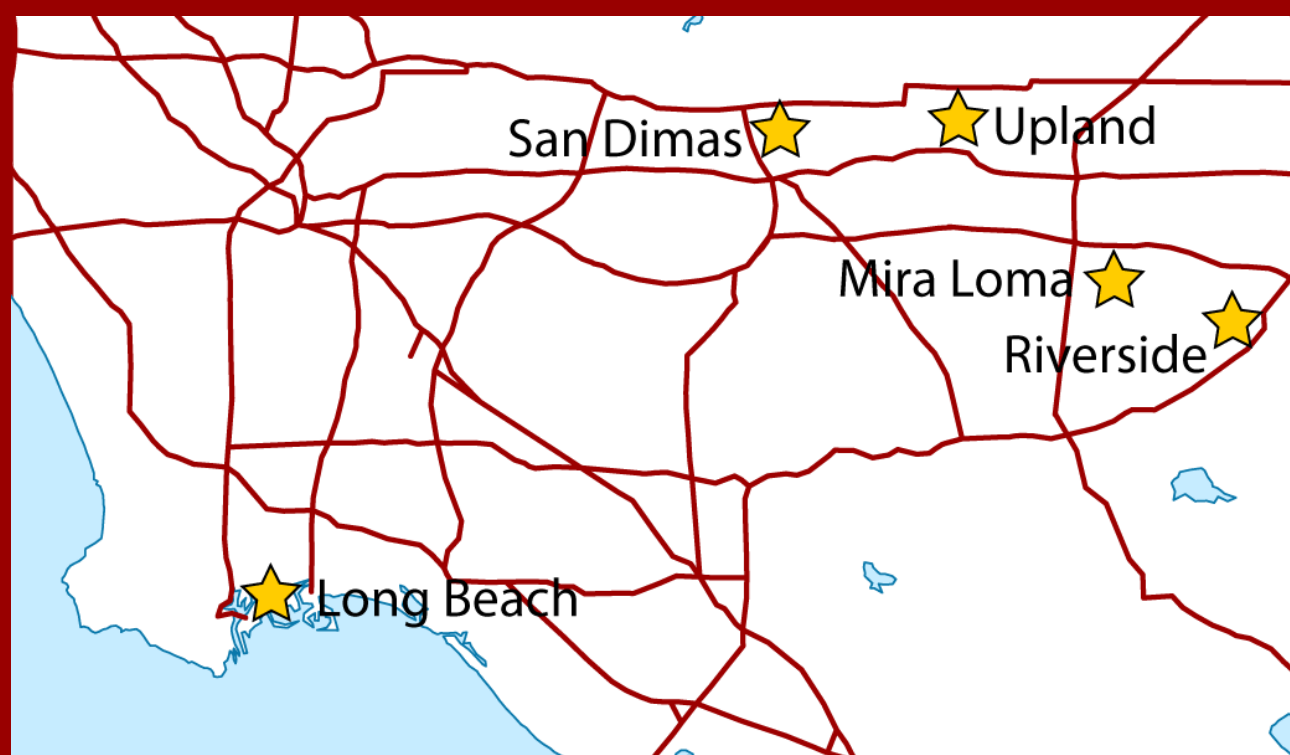
USC Researchers find less pollution in LA area is associated with better lung function in children

USC CHILDREN'S HEALTH STUDY

2,120 Children

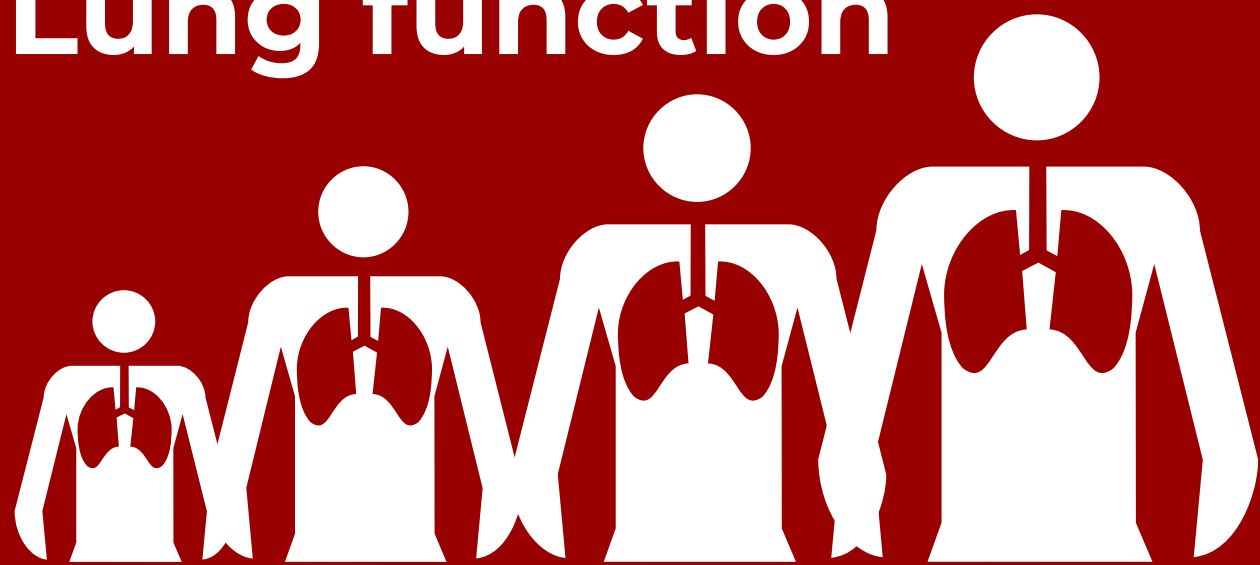


5 SoCal Communities



WHAT WAS MEASURED ?

Lung function



3 groups of kids were tested from 11-15 years of age.

Group 1 was tested: 1994-1998

Group 2 was tested: 1997-2001

Group 3 was tested: 2007-2011

Pollution

Pollution levels across So Cal have been measured for a period spanning 20 years starting in 1994.



Particles: Coarse (PM10), Fine (PM 2.5)

Gases: Nitrogen Dioxide (NO2), Ozone (O3)

THE FINDINGS

POLLUTION DOWN, LUNG HEALTH UP

Air quality in the Los Angeles basin, as measured in five cities by USC researchers, improved over two decades. That provided a more healthful environment for children's growing lungs.

AIR POLLUTION

Nitrogen dioxide Fine particles



33%



47%

Source: USC Children's Health Study

CHILDREN'S LUNGS

In 1998, nearly eight of 100 15-year-olds had significant lung deficits.



By 2011, only about 3 1/2 of 100 15-year-olds had significant lung deficits.



USC Graphic by Molly Zisk

Gauderman, et al. N Engl J Med 2015; 372:905-913. DOI: 10.1056/NEJMoa1414123

USC Infographic: Wendy Gutschow



@USCEnviroHealth



@USCEHC



EJRESEARCHLAB.USC.EDU