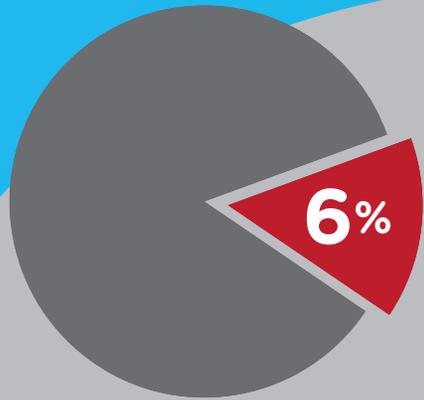


Residential Wood-burning Emissions In Utah's Valleys



Scientists with the Utah Department of Environmental Quality measure the levels of levoglucosan, a unique wood-smoke tracer, to determine the amount of wood smoke present during wintertime inversions.



RESIDENTIAL WOOD BURNING

Solid-fuel burning makes up about **6%** of Wasatch Front air pollution during winter inversions

PREHISTORIC WOOD BURNING

The earliest definitive evidence of prehistoric humans using fire took place in South Africa about **1 MILLION** years ago



CURRENT REGULATIONS

MANDATORY NO BURN DAYS
occur when PM2.5 reaches 25 ug/m³



VOLUNTARY NO BURN DAYS
occur when PM2.5 reaches 15 ug/m³



NATURAL GAS

Fireplaces emit **3,000** times as much particulate matter for the same heat as a gas furnace

WOOD SMOKE ALONG THE WASATCH FRONT:

Highest wood-smoke levels have been measured at **NORTH PROVO**, followed by **SMITHFIELD** and **SALT LAKE CITY/BRIGHAM CITY**



UTAH DEPARTMENT of ENVIRONMENTAL QUALITY
AIR QUALITY



In addition to particle pollution, wood smoke contains several toxic harmful air pollutants including: **BENZENE, FORMALDEHYDE, ACROLEIN** and **POLYCYCLIC AROMATIC HYDROCARBONS**