

'OzoneMap' app delivering real-time air quality reports

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"OzoneMap" is an app for Apple and Android products that delivers real-time

ozone reports for the city of Houston. Credit: Courtesy of the University of Houston

Several health risks are attributed to ozone exposure. These include aggravated asthma, coughing, inflamed breathing passages and increased vulnerability to respiratory infections.

Now, Houstonians have a new tool to help determine air quality in their communities and throughout the greater metropolitan area. "OzoneMap" is a free smart phone and tablet [app](#) (for both Apple and Android products) that delivers real-time air quality reports.

OzoneMapThe app is made possible through a partnership between the University of Houston, Air Alliance Houston and the American Lung Association. It is among the clean air initiatives sponsored by a three-year \$450,000 grant from Houston Endowment and builds on the partnership's previous project [HoustonCleanAirNetwork.com](#), a website delivering real-time [ozone](#) updates. UH computer science students under the supervision of professor Ioannis Pavlidis developed "OzoneMap" to make that site's information available on a [mobile platform](#).

"OzoneMap" will be showcased during a Houston Ozone Action Day event at 12:30 p.m., March 22 at Spring Branch Community Health Center (1615 Hillendahl, Ste. 100). Representatives from the partnering institutions will be in attendance including Dan Price, professor in UH's Honors College and philosophy department, and Barry Lefer, associate chair UH's Department of Earth and Atmospheric Sciences. Members of the community are invited to learn more about "OzoneMap."

"The app allows users to see whether ozone has reached dangerous levels in their respective neighborhoods, or if the clouds have already passed,"

Price said. "It will be particularly helpful for parents or educators who are concerned with children's health and for those with ozone sensitivity."

"OzoneMap" features a map of the greater Houston area. Colored clouds illustrate [ozone levels](#) in different parts of the city. Conditions range from good (white) to hazardous (purple). The app's users can select from three different maps – standard, satellite or hybrid – and can access information on the health effects of ozone.

"The purpose of this app is to better serve the public health needs of Houstonians," Price said. "An app is a convenient platform for this kind of tool. Almost everyone has mobile phones or tablets, so it's easy to find out whether an ozone cloud is forming in your community or perhaps another part of town where you might be headed."

Both the site and app will prove helpful when planning outdoor activities, Price said. Individuals with respiratory conditions can access ozone reports to avoid exposure to ground-level ozone. Also, parents, teachers or coaches can determine whether conditions are appropriate for recess or sporting events.

"There has been research that suggests that heart attacks are more likely during days with high ozone and that ozone is a trigger for asthma," Price said.

Houston is particularly ripe for ozone considering the number of vehicles, chemical plants and oil refineries that generate noxious emissions," Lefer added.

"There are 30 – 40 days each year in which dangerous levels of ozone are somewhere in the Houston area," Lefer said. "There are even more days in which the city is under an [air quality](#) alert. Residents, however,

become desensitized to these facts. This app helps people become more informed about their environment and will allow them to make smart, healthy decisions before venturing outdoors."

OzoneMap is now available for Android devices through Google Play and for Apple products through the Apple App Store.

Provided by University of Houston

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