Relationship Between Air Pollution and Cardiovascular Health in Conjunction with The Deepwater Horizon Gulf Oil Spill.

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The Deepwater Horizon oil spill of 2010 caused damage to marine life and many coastal communities in the Gulf of Mexico. The effects of the spill have been seen through the death of wildlife, closing of coastal businesses, and emotional distress documented in the media and more recently in scientific literature. Impacts to human health, both acute and chronic, are still being studied. Air pollution associated with industrial and environmental disasters can cause a decrease in the health of the effected populations. The purpose of this hypothesis generating study is to better understand crude oil components, dispersants, and air pollutants as they relate to the Deepwater Horizon oil spill and possible health effects. For example, effects on respiratory health such as asthma and chest inflammation and cardiovascular disease are of particular interest. This study will investigate three coastal counties of Mississippi: Jackson, Harrison, and Hancock. Secondary data will be collected for these three counties and will be analyzed using bivariate correlations and regression analyses. The purpose of the analysis will be to explore the relationship between air pollution and cardiovascular health prior to the spill. Information will be reported about the change in ambient air environment after the spill which will help future studies. Because disasters are unforeseen, it is important for clinicians and residents to have an understanding about possible outcomes post-disaster and the associated health risks.

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