Effects of Asian dust storm events on daily mortality in Taipei Taiwan.

陳永興
Chen YS;Sheen PC;Chen ER;Liu YK;Wu TN;Yang CY

摘要

Abstract

In spring, windblown dust storms originating in the deserts of Mongolia and China make their way to Taipei City. These occurrences are known as Asian dust storm events. The objective of this study was to assess the possible effects of Asian dust storms on the mortality of residents in Taipei, Taiwan, during the period from 1995 to 2000. We identified 39 dust storm episodes, which were classified as index days. Daily deaths on the index days were compared with deaths on the comparison days. We selected two comparison days for each index day, 7 days before the index day and 7 days after the index day. The strongest estimated effects of dust storms were increases of 7.66% in risk for respiratory disease 1 day after the event, 4.92% for total deaths 2 days following the dust storms and 2.59% for circulatory diseases 2 days following the dust storms. However, none of these effects were statistically significant. This study found greater specificity for associations with respiratory deaths, and this increases the likelihood that the association between dust events and daily mortality represents a causal relationship.