



DEPARTMENT OF HEALTH

NEIL ABERCROMBIE
GOVERNOR

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NEW YEAR'S AIR QUALITY AND FIREWORKS-RELATED INJURIES CONTINUE TO IMPROVE ON OAHU

HONOLULU - The Hawaii State Department of Health (DOH) Clean Air Branch measured low levels of smoke from fireworks during the 2014 New Year period, with particulate levels on Oahu showing continued improvement over years prior to the 2011 ban on certain fireworks on Oahu. The lower levels continue a trend that coincides with reduced fireworks activity resulting from the 2011 ban.

The DOH measures particulate levels at four air monitoring stations on Oahu (Honolulu, Pearl City, Sand Island, and Kapolei). Fireworks smoke consist primarily of fine particulate matter (PM_{2.5}), which can penetrate into the lungs and aggravate existing respiratory conditions such as asthma, emphysema and chronic bronchitis. The PM_{2.5} national standard is 35 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) averaged over 24 hours.

During the 2014 New Year period, the particulate levels were measured at $16 \mu\text{g}/\text{m}^3$ or lower in all areas, with the highest recorded particulate level of $16 \mu\text{g}/\text{m}^3$ in Pearl City. The particulate monitoring stations on Kauai (Niumalu), Maui (Paia and Kihei) and the Big Island (Hilo, Kona, Mountain View, Ocean View, Pahala, and Waikoloa) also measured levels below the standard.

The use of fireworks during the New Year's celebration will always affect the air quality, but the degree of impact for any location is greatly influenced by weather conditions such as wind and rain, the amount of fireworks burned in the area, and the configuration of the land. New Year's data is also available at the Clean Air Branch website at: <http://health.hawaii.gov/cab/>.

Information collected on fireworks-related injuries over the New Year period of Dec. 31-Jan. 2, show a total of 33 injuries treated in emergency rooms throughout the state. This is the second lowest total over the 14-year period data has been collected and a 17 percent decrease from the 40 injuries documented in the previous New Year period. Fireworks-related injuries continue to be relatively low on Oahu in the three years following a Honolulu County ordinance to regulate their use. The reduced number of injuries is particularly apparent among child-aged patients (under 18 years of age). The data was collected by

the DOH Injury Prevention program from 22 emergency departments of all hospitals throughout the state and the Hana and Waianae Coast Comprehensive Health Centers.

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