

It is fortunate that large-scale fires are rare events, since they are very destructive and a serious threat to life. Our concern with massive fires is restricted in this instance to large urban area fires, fires that involve many structures burning simultaneously.

There are some features of such large area fires that are not important in the more frequent localized city fire, which may present new and unanticipated hazards to life and property during a large-scale fire.

It is in the hope that a better understanding of the nature of such large-scale fires can lead to measures for minimizing casualties and damage that the current research is being pursued.

Tragic experience has taught us that a variety of major disturbances can lead to large-scale fires:

- Earthquakes--as in San Francisco, 1906.
- Civil disorder--as in the Watts riots, 1965.
- Explosions or crashes of ships, aircraft, trains, or trucks--as in the Texas City ship explosion, 1947.
- Accidental ignitions associated with no serious disruption--as in the great Chicago fire, 1871, said to have been started by an overturned lantern in a shed. (Interestingly, eight blocks of Chicago had burned the day before, due to another accidental ignition.)
- Warfare--as in the sacking of Rome, Napoleon's occupation of Moscow, or World War II.

Massive fires can and do occur under such a wide range of disruptive circumstances that their characteristics and consequences are of grave concern to those responsible for public safety and protection.