

DEATH RISE LAID TO '53 SMOG HERE

**Report Says Daily Rate Was
17 to 26 Above Normal
—All Ages Affected**

By **ROBERT K. PLUMB**

A study of a ten-day period of unusually heavy air pollution in New York City in November, 1953, has disclosed "a marked increase of deaths" for the period.

The study said that from Nov. 15 through Nov. 24, the average daily number of deaths was 244. The average daily number of deaths for six "control" years, 1950, '51, '52, '54, '55 and '56, was 218 to 227.

This would suggest that possibly 170 deaths and perhaps as many as 260 during the ten-day period were directly due to air pollution. However, this conclusion could not be verified by a member of the research team.

The research team was headed by Dr. Leonard Greenburg, former Commissioner of Air Pollution Control and now Professor of Preventive and Environmental Medicine at the Albert Einstein College of Medicine. It has just finished the study, the first complete analysis of a period of heavy air pollution in the city.

Air Kept From Rising

During the period studied the Eastern Seaboard was in a high-pressure area. In addition, a temperature inversion—an overlying layer of cold air—kept warm air from rising and carrying away pollutants. The research group said the pollution had been carried in from industrial areas of Ohio, Pennsylvania, New Jersey and New England, and had mixed with industrial fumes from plants in New York.

The acid-laden smog hung over the city from Nov. 12 to Nov. 21. Apparently, it did not affect the death rate until it had persisted for three days. And, according to the study, the death rate remained high for three days after the air had cleared.

"The evidence is that there was an excess of deaths in the ten days of November over the numbers for the same period in six control years," the researchers said. "We make this statement with more than 95 per cent confidence."

The excess deaths, the group said, were recorded in all age brackets.

More Than 250 Died

On six of the ten days, the report said, more than 250 people died in the city. In the six control years, there were only six days in which so many people died.

Records also showed that during the smog period in New York, thousands of persons complained of burning eyes and throats.

The group noted that many experts felt that "air pollution affects health even when the degree of pollution is not so intense and the amount of illness not so dramatic."

The researchers compared the city incident with three documented episodes of deaths known to be due to air pollution. These were in the Meuse

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October, 1948, when about 6,000 became ill and twenty died, and in London for two weeks De-Valley of Belgium in December, 1930, when 6,000 became ill and sixty died; in Donora, Pa., in cember, 1952, when there were about 4,000 more deaths than during the preceding two-week period.

According to the World Health Organization, the number of deaths in the Meuse Valley case was 10.5 times the number ordinarily to be expected for an equivalent period of time and season.

It is not clear from the Greenburg study exactly how many deaths in the city between Nov. 15 and 24 could be directly attributed to air pollution. Nor was it possible, according to the report, to find how many people became sick but did not die during the period.

Dr. Greenburg is in Europe and his associates could not be reached here yesterday.

The analysis, begun in 1953, was made with a grant from the National Institutes of Health and the cooperation of the city Department of Air Pollution Control.

Incinerator Rules Amended

The city's Department of Air Pollution Control, in a move to cut air pollution, has announced new criteria for flue-fed incinerators, the type in use on most apartment buildings.

The new criteria were announced yesterday by Commissioner Arthur J. Benline.

Among them is a requirement that installations that use the flue as both a flue and a refuse chute be equipped with locks on the hopper doors so they may be kept closed during the burning cycle. Another is that new incinerator systems be automatic in buildings with more than 500 rooms.

Copies of the criteria may be obtained from the Bureau of Engineering, Department of Air Pollution Control, 15 Park Row, New York 38.