

《北部多市雾霾导致交通混乱》

The lingering smog has shrouded northern China for days. The country's weather authorities issued an orange alert again on Friday morning, which is the second highest level warning for severe air pollution.

In some northern regions, the dense smog has reduced visibility to about 200 meters, with some areas even less than 50 meters, causing massive traffic disruptions.

Here in the Chinese capital, about 150 flights were cancelled and more than 80 delayed due to the heavy smog. And all expressways in neighboring Tianjin municipality were forced to close.

Meanwhile the haze has also caused a surge of patients with respiratory issues at local hospitals.

A white Christmas has arrived here in Beijing. But unfortunately, not a snowy one. Local hospitals have seen a surge in patients with respiratory issues, suffering from the choking smog.

"If it were just a sore throat, I would take some pills and drink more water at home. But this time it got so serious I came here to the hospital,"

"And I feel like I'm spitting up dust," said a patient.

Similar symptoms occur in many people during smoggy days. A group of scientists at Zhejiang University has discovered that the smog-triggered cell autophagy could be leading to their respiratory inflammation.

"Breathing in pollutants like PM2.5 could continuously induce autophagy in airway epithelial cells,"

"This process will cause damage, such as the death of the cells, and could cause a massive amount of mucus secretion, as well as an inflammatory reaction," said Chen Zihua, a researcher of Inst. of Respiratory Disease, Zhejiang Univ..

Autophagy is a mechanism where cells disassemble unnecessary cellular components to survive, when lacking of nutrients or stimulated by the environment.

Through a series of experiments, researchers found that by inhibiting the process of autophagy, inflammation could be controlled. And this finding could be very helpful in treating respiratory issues triggered by smog.

"Inhibiting the autophagy process of normal cells in the body may end up with bad results, but when dealing with diseases, when the environment has induced too much autophagy in cells, in this situation, it is very necessary to control it," said Chen.

ZheJiang University published this finding recently, and research and development on drugs is now underway. Researchers there are striving to achieve a breakthrough in curing diseases caused by smog.

But more importantly, finding a cure for this hideous pollution problem, is a more urgent task.

