Rampant fires in the Amazon are "poisoning the air" of the world's biggest rainforest, causing a sharp rise in respiratory emergencies in a region already hit hard by COVID-19, said a study published Wednesday.

The fires that engulfed the Brazilian Amazon last year to global outcry caused an estimated 2,195 people in the region to be hospitalized for respiratory distress driven by inhaling smoke-polluted air, found the study by Human Rights Watch with Brazil's Amazon Environmental Research Institute (IPAM) and Institute for Health Policy Studies (IEPS).

That included 467 babies and 1,080 people over 60—70 percent of the hospitalizations, it said.

With data so far this year again showing alarming levels of fires and deforestation, the problem could be even worse in 2020, the authors said.

"Fires resulting from unchecked deforestation are poisoning the air millions of people breathe, affecting health throughout the Brazilian Amazon," they said in a statement.

The fires are mainly caused by people clearing land for farming and ranching, then illegally burning the trees.

The study used a statistical analysis of data on hospitalizations for respiratory emergencies to estimate how much of the increase observed in 2019 was attributable to the fires.

The authors warned the problem would be exacerbated in 2020 by the coronavirus pandemic, which has hit the Brazilian Amazon region hard and could combine with fire season, which typically peaks from August to October, to strain hospitals' capacity.

The authors also warned of the impact of air pollution on indigenous communities in the Amazon, a population particularly vulnerable to COVID-19.

That echoed the results of another study published Tuesday by Brazil's Socio-Environmental Institute (ISA), which found a sharp rise in hospitalizations of indigenous people during fire season.

The latest study's authors criticized Brazilian President Jair Bolsonaro's policies on the Amazon, 60 percent of which is in Brazil.

"The Bolsonaro administration's persistent failure to tackle this environmental crisis has immediate consequences for the health of Amazon residents and long-term consequences for global climate change," said Human Rights Watch's Brazil director, Maria Laura Canineu.

The far-right leader recently called the surge in Amazon fires "a lie."

But figures from his own government show the number of fires in the Brazilian Amazon rose 28 percent last month from July 2019, to 6,803.