

The report on the state of air quality, published by the Environmental Protection Agency, shows that during the last year, the air in 14 cities in Serbia was excessively polluted. These cities were Belgrade, Nis, Smederevo, Kosjeric, Pancevo, Novi Sad, Uzice, Bor, Valjevo, Kraljevo, Zajecar, Pozarevac, Subotica and Beocin.

Long-term exposure of people to air pollution increases the risk of diseases not only of the respiratory system, but also of cardiovascular and some diseases of the nervous system, while inhaling polluted air is detrimental to children's development, warns Dragana Jovanović, pulmonologist and professor at the Medical Faculty. The results of a pilot study conducted by the Agency on the impact of industrial pollution on the health of the population in Bor show that the inhabitants of this city are significantly at higher risk of getting and dying from more cancers than skin tumors, and there is a higher risk of death from several other diseases.

Dr. Jovanović explains that when an adult is exposed to the mentioned air pollution and inhalation of pollution particles for a longer period, there is a much higher risk of respiratory infections, pneumonia is more frequent, and even people who do not have allergies can have allergic reactions and spasms.

"Exposure to pollution leads to worsening of all chronic diseases: primarily asthma and chronic bronchitis, and the risk of developing lung cancer is higher," warns Jovanović. However, she adds that not only the respiratory organs are endangered by the pollution, but that the cardiovascular system can also suffer.

"Either due to direct or indirect influences, people who are exposed to air pollution are more likely to have an acute myocardial infarction, have altered heart function and high blood pressure, and there is a higher risk of angina pectoris," emphasizes Dr. Jovanović. Certain diseases of the nervous system, such as Alzheimer's or Parkinson's disease, as stated by our interlocutor, are also related to more frequent exposure to the heavy metals, which are present in aero-pollution.

### **Detrimental impact of pollution on children**

Dr. Dragana Jovanović points out that growing up in environments where air pollution is constantly increasing can be detrimental to children's health. "The development of the lungs in children lasts for years, and is most important in the first ten years of life. In those years, inhalation of such pollution leads to poorer lung development, to much more frequent lung diseases, and those children often have weaker lung function ", explains Jovanović. As an example, she states that experiences from the United States show that when children move from a polluted part of the country to an area that is not polluted, lung function improves.

“When children are continuously exposed to pollution, as is the case here in Belgrade, cases of asthma are much more common, and all respiratory infections last longer and are harder to recover,” adds Jovanović.

According to her, the impact of constant exposure to pollution on the nervous system of children, as well as the developmental disorders that they can lead to, is worrying. “When, as in Smederevo, Bor, and partly in Belgrade, you have the presence of heavy metals in the air, such as mercury and lead, and sulfur and nitrogen compounds, all this can be toxic to children and can cause brain development disorders, and sometimes more severe damage. It is possible that there will be changes in behavior, such as the manifestation of aggression,” she emphasizes.

Exposure of pregnant women to pollution, as he warns, can lead to fetal anomalies and increase the risk of later development of chronic diseases in children, such as obesity or diabetes. “It costs the state much more to release all this that is happening, because it is clear that taking certain measures against pollution would reduce people’s illness and thus the costs of illness and treatment,” says Dr. Jovanović.

Exposure to pollution generally leads to a decline in immunity, and thus can, as our interlocutor points out, affect the ability of the organism to fight an infection such as COVID19.

She adds that due to all the events related to the coronavirus, it promotes the development of other chronic diseases and their adequate treatment.

“Due to the decisions made from today to tomorrow to turn some specialist hospitals into COVID hospitals, there have been situations where inadequate and insufficient treatment of chronic diseases, that much less new patients are included in the therapy for some malignant diseases, which is disastrous for further course treatment “, concludes Dr. Jovanović.

Source: nova.rs