

## 2. ACUTE RESPIRATORY FAILURE

**Author:** Catruc Rodica

**Scientific adviser:** Larisa Rezneac, MD, Associate Professor, Department of Emergency Medicine, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

**Introduction.** Respiratory failure is a decrease in the ability of the lung system to achieve optimal respiratory gas exchange for oxygen and carbon dioxide. It is manifested by insufficient oxygenation, named - hypoxemia. (decrease the partial pressure of oxygen <60 mmHg) and ventilatory failure - hypercapnia - increasing the partial pressure of carbon dioxide 50 mmHg. Breathing difficulties may be terrible and disturbing. Respiratory function is the first affected by the new Coronavirus. In many cases, the disease is not definitively treated. The actuality of this subject is accentuated in the context of the increased risk of spreading the infection caused by the Sars-Cov-2 virus.

**Aim of study.** In order to ensure an adequate degree of preparation and response to Covid-19 infection, regarding to the actualized recommendations of World Health Organization, it is mandatory to implement or adjust the public health measures in context of Covid-19 as well as good European and International practices.

**Methods and materials.** The study of specialized medical literature, study protocol, study group, selection of medical data and ethical issues, laboratory tests and tested biological samples, techniques used in lung imaging, statistical analysis of data.

**Results.** People who had Covid-19 ,showed symptoms like flu, as well as respiratory tract infection with fever (89%) cough (68%) fatigue (38%), 19% breathing difficulties. The severity of the disease varies from an asymptomatic infection, the easy disease of the upper respiratory tract, severe viral pneumonia with respiratory failure or even death. Current reports estimate that 80% of cases are asymptomatic or mild, 15% cases are severe (the patient needs an oxygen mask) and 5% are in critical condition and require ventilation and connection to breathing appliances.

**Conclusion.** In conclusion, after a serious case of COVID-19, a patient's lungs can recover, but not overnight. "Recovery from lung damage takes time," "There's the initial injury to the lungs, followed by scarring. Over time, the tissue heals, but it can take three months to a year or more for a person's lung function to return to pre-COVID-19 levels. After treatment, patients need to monitor their health - using scales such: Borg scale of effort perception, scales of dyspnea, fatigue scales, as well as clinical signs such as: respiratory rate, heart rate, blood pressure, oxygen saturation of peripheral blood.