Analysis of hazardous plastic waste generated during the COVID-19 pandemic

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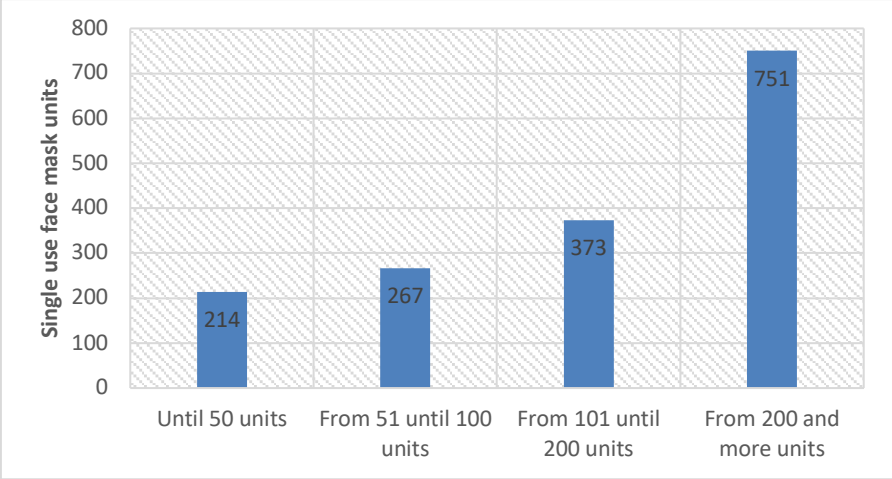
Since 11 March 2020, the COVID-19 pandemic has been declared worldwide. During it, the wearing of face masks in many countries of the world became mandatory. Such a decision was also taken by the Government of the Republic of Lithuania to contain the pandemic. Some of the public viewed this decision negatively because of the inconvenience caused by masks and the intervention in private life, despite controversial evidence of the effectiveness of wearing masks. The article discusses respondents' responses when assessing the wearing habits of face masks in Lithuania during the COVID-19 pandemic. Discarded masks may risk spreading coronavirus to waste collectors, litter pickers or members of the public who first come across the litter. In certain conditions, the virus can survive on a plastic surgical mask for seven days. Plastic waste can smother environments and break up ecosystems. Individual persons who dispose of face masks together with household waste in a mixed municipal waste container, not packed in a bag. Masks are usually purchased at pharmacies or provided by employers. Disposable face masks are usually changed after each workday. In Lithuania currently has about 2 million adults. If everyone used disposable masks and replaced them every day, then 2 million masks would be discarded every day. As one mask weighs about 2.7274 g.- adults in Lithuania would generate 5.4548 tons of plastic waste per day. Multiplied by 30 generate 163,644 tons per month.

There's also a significant amount of waste generated by discarded protective sterile plastic clothing The results obtained indicate a lack of information on how to dispose of masks, which are often disposed of together with household waste in a mixed municipal waste container, not packed in a bag. The results of the survey show that a mask worn at most a few times is kept in a pocket or handbag).



Picture 1. Quantity of disposable face masks purchase

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