

# **ACTION REPORT**

## **Introduction**

The Action was an initiative of the Respiratory Physiology Laboratory of the Medical School of the University of Cyprus in Nicosia, Cyprus. The Action was entitled “Respiratory Health and Wildfires”, and took place in the regions of Drafi, Rafina-Pikermi and Anthousa, Pallini in Attica, Greece on the world respiratory health awareness dates in September 2022. The aforementioned regions are placed at the urban-wildland interface and are frequently affected by wildfires. Recently, in July 2022, wildfires in these regions had a significant local ecological impact, including extended deforestation and desertation of the area and resultant loss of wildlife, as well as local socioeconomic suppression with the destruction of multiple private properties.

## **Aims**

The major aim of the Action was to screen the population that resides in the aforementioned regions for possible lung diseases, so that patients and individuals at high risk are properly informed, educated, and aware about the harmful effects of wildfire-derived air pollution on the respiratory system and their potential acute sequelae and long-term complications on respiratory health. Secondary aims included: a) the education of individuals about the precautionary measures that have to be taken for the prevention of the occurrence of wildfires and of the harmful effects of wildfire-derived air pollution on respiratory health; b) the familiarization of individuals with lung function testing; c) the education of individuals about the harmful effects of tobacco smoking; and d) the offer of advice regarding cessation of tobacco smoking and attendance of respiratory health professionals when appropriate.

## **Dates, Places, and Activities**

The Action took place during the world respiratory health awareness days in September 2022 at the following places:

- 7<sup>th</sup> of September 2022 (International Day of Clean Air): Public Square with Citizens Entertainment Centre
- 24<sup>th</sup> of September 2022: Pharmacy
- 25<sup>th</sup> of September 2022 (World Environmental Health Day): Public Square with Citizens Entertainment Centre
- 26<sup>th</sup> of September 2022 (Environmental Health Day): Pharmacy

In the beginning of September 2022, dissemination of the events was done by: a) posting on the official Facebook webpage of the Respiratory Physiology Laboratory; b) distributing

informative leaflets to the area citizens; and c) hanging informative posters at two local pharmacies and at the local square with the Citizens Entertainment Centre. The posters and the leaflets included information in Greek regarding who we are, the aims, the target population, the type of activities, and the particular dates of the Action, as well as basic tips for the prevention of wildfire occurrence and their harmful effects on respiratory health. In all dissemination means it was mentioned that the Action was organized under the auspices of the European Lung Foundation, and the Healthy Lungs for Life. The poster and the leaflet are attached with this Report.

The screening of the local population was done by means of lung function testing using a portable spirometer, i.e. MIR Spirodoc™ (Rome, Italy), and completion of validated questionnaires about respiratory health, i.e. modified MRC scale and CAT scale. Based on the results, the individuals were further advised to attend a respiratory health professional when appropriate, e.g. when an obstructive or a restrictive spirometric pattern was noted and/or when significant respiratory symptoms were reported. Detailed spirometry reports were either sent to the individuals by e-mail or given to them at the sites of spirometry sessions on later dates. Finally, all individuals were given detailed information about the topics discussed in the Aims Section.

Overall, in all Action sessions, a total of more than 100 local citizens of the target areas were involved in the activities, and all of them were informed about the Action and its aims, and they were educated about the measures needed for the prevention of wildfires and their harmful effects on respiratory health. More importantly, 58 individuals were additionally screened by the use of spirometry and validated questionnaires. Those that presented abnormal spirometric findings and/or reported severe respiratory symptoms, were advised to seek healthcare at respiratory health professionals.

## **Conclusions**

We strongly believe that this Action promoted the awareness of the population in the high-risk areas at the urban-wildland interface for wildfires, and the urge to protect the forests and avoid any high-risk activities during the fire season. Furthermore, we expect that the individuals that were found to have affected lung function will visit a pulmonologist and start the appropriate treatment, as they were advised. Our pleasant interaction with these people gave us the opportunity to give them information regarding respiratory medicine and their lung health as well as to explain them how “health lungs” are connected with “healthy life”. In conclusion, this action had positive impact on the population of these areas as well as the volunteers involved.



Figures 1-2. Extensive deforestation of the region after the wildfires in July 2022.





Figures 3-4. Session on 7<sup>th</sup> of September 2022.





Figures 5-7. Session on 24<sup>th</sup> of September 2022.

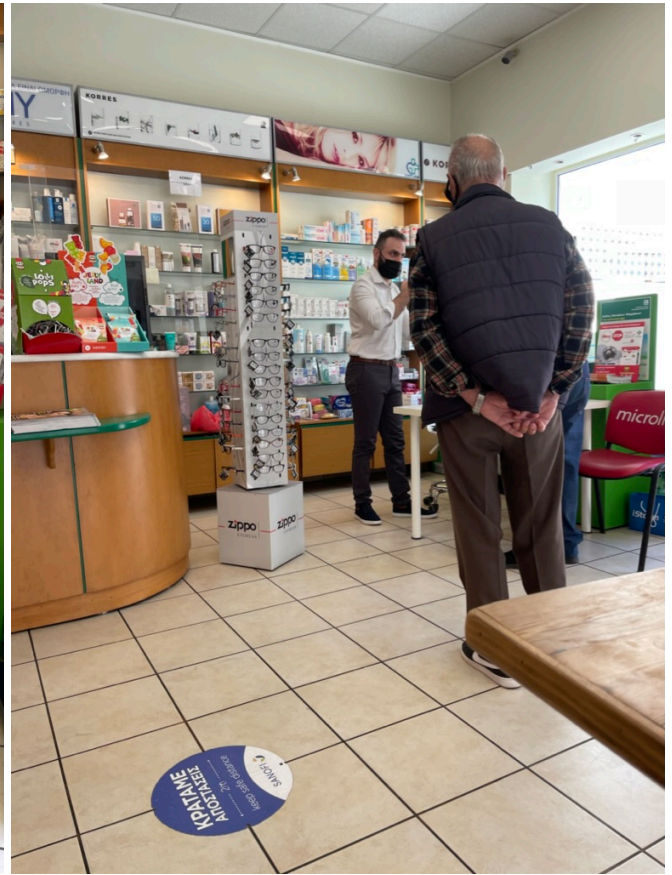




Figures 8-9. Session on 24<sup>th</sup> of September 2022.







Figures 10-13. Session on 26<sup>th</sup> of September 2022.