

MOBILE TEST & QUARANTINE FACILITY

TODAY, HEALTH AND ILLNESS ARE GLOBAL NOTIONS AND WORSENING HEALTH CREATES CROSS-NATIONAL WORRIES. The ease and speed of intercontinental travel increases the contagion risk of diseases that could spread via physical contact, bodily fluids, or air, and threatens the wellbeing of the world's population. The boundless nature of the threat requires the counter-measures and precautions to be boundless as well. Enhanced health services and coverage, an expanded health organizations network to meet the diagnostic and treatment-related needs of all citizens are among a long list of "must have's" during such processes. However, the lack of staff and equipment at local clinics and the lack of clinics from a wider view pose obstacles to the effective handling of widespread health emergencies. The insufficiency of health services during crises may cause rural areas to remain devoid of treatment and cause fatalities. Moreover, if these people move to reach better health services, the diseases could spread more easily, and restrike certain areas. Papiilon created the Mobile Test and Quarantine Facility to tackle these problems.

The mobile facility is designed to serve as a fully-equipped test and quarantine center.

The container is divided into spaces to prevent the contact of patients who are diagnosed with less severe, or non-infectious diseases and those who show the symptoms of epidemic diseases.



The facility consists of a treatment room, a mini lab, and a quarantine room. Two positive pressure rooms are situated at the entrance and exit points of the quarantine room to be used as preparation and sterilization spaces and to create an opposite pressure environment to control the air entering and exiting the quarantine room.

Medical personnel change into their scrubs and sterilize in these preparation rooms before entering the quarantine space. The quarantine space itself is a negative pressure environment. Since the air escapes from higher to lower pressure environments, this design ensures that the air in the quarantine space does not exit the room and the spread of airborne diseases are therefore prevented. The doors to the quarantine room are automatic and the necessary equipment within the room is fastened to a higher point on the wall minimizing contact. The fans on the walls of the quarantine room refresh the air within the room for at least twelve times per hour.

The HEPA filters in the fans and the pressure difference ensure the freshness of air in the quarantine space.

The Mobile Test and Quarantine Facility is designed in the form of a container and can be assembled to a truck or lorry. Thanks to the mobile facility, even the most remote and rural areas can benefit from critical health services, and equality regarding one of our most basic rights, the right to life can be ensured.

The mobile design of the facility enables the transfer of people who are diagnosed with an epidemic/pandemic or an infectious disease within the quarantine space to a full-fledged institution for further testing and treatment.

This eliminates the need for the patient's finding his own means to access quality healthcare and cuts the contact between the infected and the rest of the local population and minimizes the risk of infection.

Papilon's Mobile Test and Quarantine Facility also brings healthcare to the remote areas or small settlements that are quarantined as part of cautionary measures for multiple cases have been spotted or suspected within the area. That way, both the wellbeing of the larger population can be protected and the quarantined groups do not feel ignored, scapegoated, or subjected to negligence. It is possible to deploy more than one mobile facility to an area to minimize contagion risk by dividing the population into smaller groups as possible.