

Decreasing pathogenic organisms while improving overall air quality at a hospital in Hungary.

CASE STUDY University of Szeged, Faculty of Medicine – Internal Medicine Clinic No. I.

100% reduction in MRSA.

As part of a trial to measure background pollution and pathogenic organisms, Novaerus units were placed in 4 locations in the University of Szeged's Department of Geriatrics and Chronic Diseases of the Internal Medicine Clinic No. I. The medical clinic was interested in improving overall air quality in the geriatric and chronic disease wards.

PROBLEM





Air samples taken before the trial revealed background pollution levels as high as 2610 cfu/m³ and MRSA levels at 40 cfu/m³. The samples were measured by the Hospital Hygiene Bacteriology Laboratory of the Csongrád County Government Office. While the clinic practiced standard hygiene protocol, they were disappointed with levels of background pollution and evidence of MRSA.

Staff and patients also complained of unpleasant odours in both the male and female wards.



CASE STUDY University of Szeged, Faculty of Medicine – Internal Medicine Clinic No 1.

SOLUTION

Novaerus NV800 units were installed in two female wards, one male ward and in the connecting corridor outside these wards. Novaerus devices use active purification plasma technology to safely and gently deactivate airborne pathogens and microorganisms at the DNA level resulting in lower risk of infection being transmitted via the air, surfaces and hands, and noticeably reduced odours.





"We would gladly use the equipment ... to increase patient safety and to safeguard the health of our colleagues."

RESULTS

Three days after installing the Novaerus units, the laboratory returned to measure background pollution and MRSA. Background pollution was reduced by an average of 67% and MRSA colonies were eliminated completely.

Patients and staff noted a substantial decrease and even elimination of previously present unpleasant odours, demonstrating the positive effects of a reduction of organic and pathogenic organisms.

Staff also reported that the noise emitted from the Novaerus units was insignificant and did not disturb patients.

Following the trial, the head physician and head nurse commented they would gladly use the equipment within the department to increase patient safety and safeguard the health of their colleagues.