Netcare
Media release

Germ destroying robots come into their own amid COVID-19 outbreak
Netcare has groundbreaking technologies to strengthen hospital infection prevention and control

Tuesday, 24 March 2020, With the increase in the spread of the novel coronavirus in South Africa, there has been a surge of interest among the public regarding the measures healthcare providers are taking to prevent the spread of infections, and more specifically COVID-19, in their facilities and in latest technologies that assist in infection prevention and control within hospitals.

Pic: The Yanex Pulsed-Xenon UV robots deployed in Netcare hospitals use high doses of UV light to destroy viruses, bacteria and fungal spores and disinfect hospital wards, theatres and other spaces within minutes.

"Netcare has for long placed an emphasis on infection prevention measures within its healthcare facilities as a result of the ongoing prevalence of highly infectious viruses such as the coronaviruses, and the so called 'superbugs'. As a result, we started to acquire super effective germ-destroying robots late in 2017, to further bolster our existing comprehensive disinfection measures," says the Netcare Group's chief executive officer, Dr Richard Friedland.

"Both the Xenex pulsed ultraviolet (UV) robots and Yanex Pulsed-Xenon UV robots deployed in Netcare hospitals use high doses of UV light to destroy viruses, bacteria and fungal spores and disinfect hospital wards, theatres and other spaces within minutes. Now, with the increase in the number of COVID-19 cases in South Africa — which unfortunately won't be the first, nor likely the last, infectious illness to reach our shores — we are pleased to have opted to invest in innovations such as these germ-eradicating robots. We have also noted that there has been a growing public interest in the technology," adds Dr Friedland.

According to Dr Friedland, the robots showed impressive infection prevention and control results internationally and during pilot trials at Netcare hospitals in 2017, a first in the country. They have since become an important and established line of defence against viruses, bacteria and fungal spores within Netcare's healthcare facilities. He says that Netcare currently has 28 robots operating at 22 sites, and will take delivery of a further 13 within the next couple of weeks.

Dr Caroline Maslo, senior clinical advisor at Netcare, says healthcare facilities globally face a daily challenge to prevent the spread of infections within the context of increasing concerns about antibiotic resistance. "Having used the robots in different settings in Netcare facilities, we found that the technology lived up to the impressive results achieved in independent international studies which endorse this method of disinfection."

"The Yanex robot, which was designed in Russia, has repeatedly proven itself to be effective and efficient, and this form of disinfection is particularly useful against antibiotic resistant bacteria, and viruses such as COVID-19 which it easily destroys. This new technology does not replace the infection risk management protocols and procedures we already have in place, but is used alongside them as an additional line of defence in our arsenal against potentially harmful germs," adds Dr Maslo.

She explains that the robots emit UV-C spectrum light, which destroys the DNA of bacteria, viruses and fungi to neutralise them and prevent them from replicating. According to Pharmateknique, marketers of the Yanex disinfection device in South Africa, the system has the ability to destroy an impressive 99,90% of germs on high-touch surfaces and 99.99% of airborne germs. The technology is entirely non-toxic, although the area being disinfected must be vacated during the robot's cycle, as our eyes are sensitive to the UV light.

"Rigorous disinfection of an area such as a room can be done in just over a minute, which means minimal disruption to busy hospital areas, and the robots can be used 24 hours a day. A more compact and mobile version that folds up into a briefcase size is also available and is used by Netcare 911 to quickly disinfect road and air ambulances and emergency vehicles."

"The technology has the added advantage in that it requires no water whilst operating, thus rendering it optimally water-wise when compared with other forms of intensive disinfection, and it furthermore uses minimal electricity. Another important benefit is that the robot's UV light does not result in any residue or potentially harmful by-products, which means it is safe for use in even the most sensitive environments, such as neonatal intensive care units where premature and other compromised babies are cared for.

Each robot deployed in Netcare facilities is connected to the Cloud and the robots generate full reports on all of their activities, which are stored on the Cloud. Relevant hospital and Netcare stakeholders are able to monitor the activities of each robot in real-time and access full reports at any time.

"Another benefit brought about by the deployment of the robots is that the cleaners responsible for operating this technology have been thoroughly trained in its use and have been able to acquire a new set of skills. This is not a case of robots replacing human labour, but rather of robots empowering their human operators."

"Many of those who are admitted to hospital are particularly vulnerable to infection. The aim of our infection prevention and control programmes and the use of technology such as this is to help protect those in our care, as well as visitors, staff members and medical practitioners from any potentially

harmful germs including COVID-19. Persons admitted to a Netcare facility can therefore be assured that the hospital's wards, theatres and other facilities is being disinfected as thoroughly as possible," concludes Dr Maslo.

Ends

To find out more about the services offered through Netcare hospitals and other of the Group's facilities, please contact Netcare's customer service centre either by email at customer.service@netcare.co.za or phone 0860 NETCARE (0860 638 2273). Note that the centre operates Mondays to Fridays from 08:00 to 16:00.

For more information on this media release, contact MNA at the contact details listed below.

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