

# Case study

## Ways to tackle the spread of coronavirus using viricidal surface decontamination

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**It is still very unclear where we are in the outbreak of coronavirus, but a number of UK companies are helping those trying to limit the spread of the virus. A recent emergency call came through to GAMBICA seeking anyone who could supply masks for clients in South East Asia. It is perhaps not surprising that only three members were immediately able to supply stocks. At the other end of the spectrum GAMBICA member, Bioquell has had historical success in disinfecting contaminated surfaces infected with similar viruses with its Hydrogen Peroxide Vapour bio-decontamination systems in hospitals and other facilities.**



Novel coronavirus (nCoV-2019) Coronavirus has been declared by the World Health Organization to be a public health emergency. The virus appears to have originated in Wuhan late last year. According to official figures as of 18 February it has infected more than 72,000 people and killed 1868. The Chinese authorities have so far followed the Severe Acute Respiratory Syndrome (SARS) playbook by applying stringent curbs to public transport and the movement of people. Authorities believe that control of the virus will depend on how quickly the rate of new infections can be brought under control and how effective other countries are at controlling any outbreaks which occur in their territories.

UK based firm Bioquell, which is owned by Ecolab, has worked to prevent the spread of deadly diseases having done extensive work during the outbreak of SARS in Asia 17 years ago. Its technology has been used against a wide range of viruses including Foot and Mouth Disease [1], Lassa Fever [2], Monkeypox, Middle East Respiratory Syndrome (MERS-CoV) and Ebola [3] predominantly by means of its rapid bio-decontamination service (RBDS).

A study on the virucidal efficacy of Bioquell's Hydrogen Peroxide Vapour was published in the April 2014 issue of The Journal of Hospital Infection. The findings showed that after exposure to Bioquell's Hydrogen Peroxide Vapour, no viable viruses were identified [4].

Surface contamination has been implicated in the transmission of certain viruses, including coronavirus, and surface decontamination as an effective measure to interrupt the spread of these agents. Respiratory viruses can contaminate and survive for long periods on environmental surfaces. This plays a key role in their spread making effective disinfection essential for stopping transmission from the environment, especially as many of these viruses have a low infective dose.

However, surface decontamination is not always achieved by conventional cleaning and disinfection techniques, and alternative solutions may be sought. Using Hydrogen Peroxide Vapour is a vapour-phase disinfection method virucidal on structurally distinct viruses dried on surfaces. It applies a uniform decontamination across the entire target area and is not limited to line-of-sight or easy-to-reach spaces.

It is pleasing to once again be able to highlight how GAMBICA members are making a major contribution to improving wellbeing internationally.

### Pipette wars

If you buy or sell pipettes, you will be interested in a statement being prepared by GAMBICA on behalf of its members to clarify the current position on CE Marking of pipettes.

Some companies have decided to CE Mark their pipettes as a way of differentiating their products in the market. However, doing so entails considerable additional and unnecessary cost for the companies concerned and therefore for their clients too. In order to help members clarify the legal position for their clients, GAMBICA is currently preparing for circulation a statement which members may wish to adopt to explain to their customers the legal position on CE Marking of pipettes.

### Zero rating for VAT

Another issue with major bottom line implications for lab equipment suppliers is a notice issued, without fanfare, by HMRC in 2018 about zero rating of lab equipment sold to charities. The effect of this notice may be to reduce the number and types of goods which have actually been eligible for zero rating.



The GAMBICA team are in working on producing clear and unambiguous guidance on which items are and are not eligible for zero rating and will be making this available to members shortly.

If you would like more information on either issue – do get in touch  
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1. Vannier M and Chewins J. Hydrogen peroxide vapour is an effective replacement for Formaldehyde in a BSL4 Foot and mouth disease vaccine manufacturing facility. *Let. Appl. Microbiol.* 2019; 69: 237-245.
2. Otter JA, Barnicoat M, Down J, Smyth D, Yezli S, Jeanes A. Hydrogen peroxide vapour decontamination of a critical care unit room used to treat a patient with Lassa fever. *J Hosp Infect* 2010;75(4):335-7.
3. Otter J.A, Mepham S, Athan B, Mack D, Smith R, Jacobs M and Hopkins S. Terminal decontamination of the Royal Free London's high-level isolation unit after a case of Ebola virus disease using hydrogen peroxide vapor. *American Journal of Infection Control.* 2016; 44: 233-5.
4. Goyal, S. M., Chander, Y., Yezli, S., & Otter, J. A. (2014). Evaluating the virucidal efficacy of hydrogen peroxide vapour. *Journal of Hospital Infection*, 86(4), 255-259.



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