Climber’s Chalk Helps Inactivate the Virus

At the start of the Corona Virus Crisis, the ABC (Association of British Climbing Walls) set up working groups to support climbing walls through the crisis. David and Robert Stevens from The Warehouse Climbing Wall, Gloucester approached Rich Emerson, ABC Chair as they had a relationship with a world leading research team in De Montfort University. Rich spoke with Jeremy Wilson from The Lakeland Climbing Centre, leader of one of the ABC working group responsible for researching the science behind the virus and climbing. We needed to understand the potential impact of chalk on the virus as there were some concerns within the climbing community around how chalk on holds may act as a reservoir of the SARS-CoV-2 virus that causes COVID-19. Between us, we commissioned the team at De Montfort University to undertake the research, led by Dr Katie Laird (Head of the Infectious Disease Research Group), Dr Maitreyi Shivkumar (Virologist) and Dr Lucy Owen (Postdoctoral Researcher). The team admit it was novel research and it took some time to set up the test method protocols.

A model coronavirus for SARS-CoV-2, human coronavirus OC43, was used for the experiments. The presence of infectious virus on a plastic surface dusted with chalk was monitored over the course of one hour. The results indicated that the amount of infectious virus was reduced by around 99% immediately upon contact with the chalky surfaces. By comparison, the control test where no chalk dust was present, showed only a slight decline in infectious virus over these time periods.

Rich Emerson, Chair of the ABC said: “This is a very helpful outcome and suggests that chalk materially reduces the risk of infection and spreading COVID-19. We hope that it will provide comfort to our customers as they return to climbing at indoor walls. We will not lessen all our other COVID-safe measures such as regular hand sanitisation and social distancing but this extra factor should temper fears that chalky handholds could be vectors of the disease. We await the formal scientific report with anticipation. I would like to thank David and Robert Stevens of The Warehouse and Jeremy Wilson of The Lakeland Climbing Centre for this research initiative and hope further work can be done worldwide as it could impact all sports where chalk is used.”

The full report will be published in early August.

Rich Emerson can be contacted on chair@abcwalls.co.uk