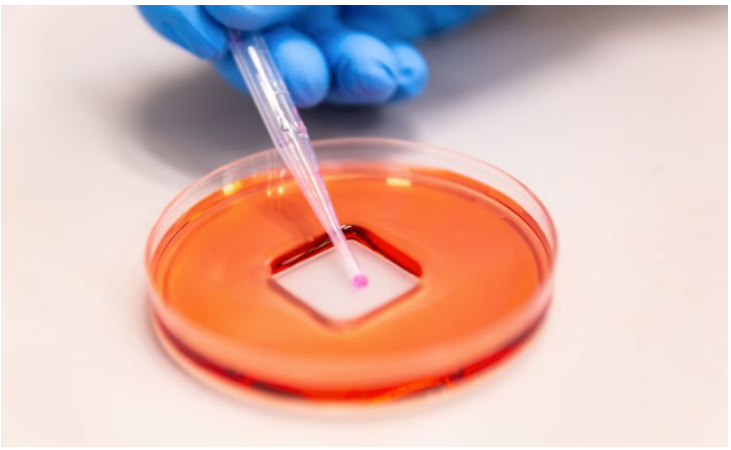
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First-of-its-kind sprayable coating to prevent spread of infection

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The researchers have established a startup to progress the technology



A first-of-its-kind sprayable coating that can prevent the surface spread of infection from bacteria and viruses including COVID-19 over a sustained period has been developed by a team of Australian researchers.

The spray works two ways: to repel viruses and bacteria through an air-filled barrier, and killing pathogens through microscopic materials if the layer becomes damaged or submerged for extended periods. The spray uses a combination of plastics strong enough to be considered an alternative to bullet-proof glass.

The coating provides a reliable alternative to standard disinfectants, which are becoming less effective and require regular reapplication, and is the only permanent surface layer proven to protect surfaces from contamination by viruses. It is safer than existing alternatives to disinfectant, with no harmful side effects and more stable potency – unlike the next most promising non-disinfectant agent that kills bacteria, silver nanoparticles.

The spray was developed over a five-year collaboration by the multi-university research team and was funded in part by Australian Research Council and NHMRC grants. The researchers have established a startup to progress the technology and make the spray available commercially, potentially within three years.