What is Germ Defence?

Germ Defence team developed and trialled first online intervention worldwide to increase handwashing to reduce spread of infection in the home

- Trialled in > 20,000 adults in H1N1 pandemic led to my SPI/SPI-B membership at that time
- Reduced respiratory (and gastrointestinal) infections in user and family members frequency, severity, consultations, antibiotics use (Lancet, 2015)



When could you wash your hands more?

It is hard to know if hands are dirty just by looking at them - they can have lots of germs on them but still look clean



MRC



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Medical

Research

Contributing to Covid-19 response



Rapid Germ Defence adaptation

- March 2020: with Germ Defence team obtained UKRI funding to adapt and disseminate Germ Defence for dissemination nationally and internationally
- Updated Germ Defence for key behaviours relevant to reducing transmission in the home
- Launched April and disseminated via media and with Public England partners
- Now being adapted with further UKRI funding as a whole school intervention for students, staff and parents

Dissemination

 Translated into 25 languages, accessed >600,000 in 170 countries <u>https://www.germdefence.org/</u>

Rapid Germ Defence research

- Southampton
- To raise awareness of need for infection control in home, initiated evidence review published in BMJ Analysis (6/5/20)
- Usage data and PPI input from users informed optimisation plus evaluation of current and intended behaviour – preprint uploaded 23/6/20 (now published Journal of Medical Internet Research)
- Carried out mixed methods study to assess acceptability and barriers to quarantining / self-isolating outside the home – preprint uploaded 7/9/20 (under review BMC Public Health)
- Carried out rapid systematic review confirming Germ Defence still the only digital intervention worldwide with evidence of effectiveness (accepted BMC Public Health)

Rapid Impacts from Germ Defence research

Germ Defence informed three SAGE papers on reducing transmission in the home (e.g. at Christmas, to combat new variant)

- Germ Defence paper only evidence on current infection control behaviour in home, relevant barriers / facilitators, effectiveness of intervening to change intentions/behaviour
- Rapid mixed methods study only evidence on acceptability and barriers to quarantine / self-isolation outside home



Simple steps to reduce viruses in your home

Welcome to **Germ Defence** – advice to help protect your household from COVID-19.

- GERM DEFENCE IS QUICK: It only takes 10 minutes to look through the website
- GERM DEFENCE PROTECTS: People who use it are less likely to catch pandemic flu or other viruses; they recover more quickly from illness and are less severely ill
- GERM DEFENCE WORKS, as shown in a research study with 20,000 people



START NOW

Rapid trials

Southampton

- Trial of providing Germ Defence to all primary care patients in England prioritised as NIHR Urgent Public Health COVID-19 Study
- 6579 general practices in England have been randomised into the study, all practices in intervention arm asked to send link to Germ Defence to patients in autumn, control practices in spring
- Will analyse impact on infections/Covid using routine data
- Trial in South America ongoing

