It’s time to clean up our act on home hygiene:

Embedding Targeted Hygiene for health resilience

A Royal Society for Public Health Report, produced in collaboration with the International Scientific Forum on Home Hygiene

Dec 2022

IFH INTERNATIONAL SCIENTIFIC FORUM ON HOME HYGIENE

RSPH ROYAL SOCIETY FOR PUBLIC HEALTH VISION, VOICE AND PRACTICE

Table of Contents

Executive Summary and report aims..... 1

Background..... 2

Targeted Hygiene – a framework for better hygiene understanding and effective hygiene practice..... 4

Public hygiene behaviours – what have we learnt from the Covid-19 pandemic?..... 7

What Targeted Hygiene offers..... 9

The way forward..... 10

Policy recommendations..... 11

References..... 12

IFH INTERNATIONAL SCIENTIFIC FORUM ON HOME HYGIENE

RSPH ROYAL SOCIETY FOR PUBLIC HEALTH VISION, VOICE AND PRACTICE

Executive Summary and report aims

Executive Summary

- Effective hygiene behaviours at home and in everyday life (HEDL) are critical to build population resilience against infectious illnesses and outbreaks.
- A new survey commissioned by Royal Society for Public Health (RSPH) in collaboration with the International Scientific Forum on Home Hygiene (IFH) shows that public awareness of, and willingness to, practise hygiene is strong, but they are confused about how to implement it effectively.
- To develop effective hygiene behaviours, we need to adopt a Microbial Risk Management approach to ensure that the public know **When**, **Where** and **How** to target hygiene practices to manage the risk of the spread of infection.
- As a nation striving to protect our NHS, become more environmentally sustainable and support the public through the cost-of-living crisis, Targeted Hygiene offers a framework for positive change by also addressing these issues.

Report aims

This report draws on the results of a recent public poll conducted by RSPH/IFH, to highlight:

- How the public's commitment to HEDL hygiene is strong, but confusion persists about how to implement it effectively;
- The issues associated with continuing with the hygiene status quo and the need for a fundamental rethink to ensure that HEDL hygiene is both effective and appropriate to the issues we currently face;
- How a targeted approach to hygiene based on risk management offers a framework to meet these challenges.

IFH INTERNATIONAL SCIENTIFIC FORUM ON HOME HYGIENE

RSPH ROYAL SOCIETY FOR PUBLIC HEALTH VISION, VOICE AND PRACTICE

Background

Why hygiene in home and everyday life is so important

Practising good hygiene starts at home. On average, we spend over a third of our lives at home.[1] Hygiene behaviours, especially those relating to hand, food, toilet, respiratory, laundry and pet hygiene have a huge bearing on overall population health. The Covid-19 pandemic also showed us the importance of practising good hygiene within our shared use of public spaces (including schools, workplaces, supermarkets, public transport, leisure settings etc). When re-opening after lockdown restrictions, facilities had to implement strategies to make them “COVID secure”, but this fundamentally depended on whether the public using these facilities practiced effective hygiene behaviours.[2,3]

In response to the pandemic, the UK Government published a 2021 vision for a National Health Resilience Strategy.[4] This affirms that a “whole-of-society approach” is needed to make us better able to adapt to uncertainty and adversity, including threats posed by disease outbreaks, and tackling antimicrobial resistance (AMR) by reducing antibiotic prescribing.[4-6] As stated in the UK 5-year AMR action plan, “*Health and social care providers can only do so much to prevent infections; when it comes to acquiring and transmitting infections in the community, the public have a huge part to play*”.[6] Such hygiene resilience will also become more crucial into the future. As the proportion of the population who are clinically vulnerable - due to ageing and underlying health conditions - increases, these people may be required to take responsibility for their heightened vulnerability to life-threatening infections. HEDL hygiene practices will also be critical to minimising avoidable ill health and alleviating the growing and unsustainable pressures on the NHS.

So, if we are to promote effective hygiene and disease resilience, we must reflect on how hygiene has been communicated and practised in the past and consider alternative, potentially more effective operational frameworks that we have available to us.

The importance of hygiene at home and in everyday life:

The status quo

In 2018 RSPH, in collaboration with IFH, carried out a UK poll* to investigate public understanding of hygiene and how their hygiene behaviours reflect beliefs about infection risks.[7,8]

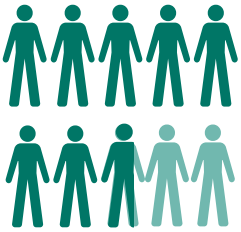
Although their basic knowledge of key hygiene practices was fairly good, in some cases, they failed to practise hygiene in situations that are risky, and in others they practised hygiene where it was unnecessary. For example, 72-76% of respondents recognised that handling raw meat and using the toilet are causal risks of gastrointestinal infection and 73% said they acted accordingly by washing their hands.[9] For example, 76% of respondents indicated that not washing their hands after handling raw meat was risky to health, and 72% indicated that they always did so. By contrast, although dishcloths are a significant causal risk for spreading foodborne pathogens, only 22% of respondents identified not washing and drying a dish cloth between uses as high risk to their health, and only 21% reported that they always do such a hygiene practice.[9]

The poll also demonstrated that the public still see dirt as an indicator of infection risk prompting them to practise untargeted routine cleaning behaviours on surfaces that pose little infection risk.[9] For example, 63% of people expressed concern that not using an antibacterial or disinfectant to clean kitchen and bathroom floors was risky and 71% said they always or often used anti-bacterials or disinfectants at these moments.[9] When questioned about their attitudes to dirt, 36% said they believed that dirt was usually or always harmful.[9]

Whilst the poll indicated that 81% of the public agreed that hygiene at home is important to limit the spread of infectious diseases, they had limited understanding of what effective hygiene entails, and how to assess infection risk and act accordingly.[9]

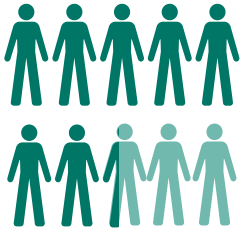
The public are more likely to practice effective hygiene when they have a clear understanding of infection risk:

76%



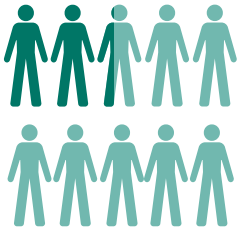
Recognise risk of not washing their hands after handing raw meat

72%



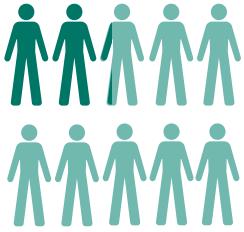
Act by always doing so

22%



Recognise the risk of not washing and drying the dish cloth between uses

21%



Act by always doing so

Targeted Hygiene –

A framework for better hygiene understanding and effective hygiene practice

In recognition of the need for change, IFH has been developing and promoting an approach to hygiene known as Targeted Hygiene†. This is based on accepted principles of risk management used in many industries (for example, food and pharmaceuticals) to prevent products being exposed to risk of contamination during manufacture. Risk management is progressively being accepted as a more practical approach for developing public health measures, particularly those such as hygiene that require a multibarrier approach.[10] This approach involves targeting hygiene practices at the times when harmful microbes are most likely to spread, and the places through which they are spread, thereby reducing exposure to harmful microbes and breaking the chain of infection. [11,12] This approach is applicable to all hygiene-related infections, including gastrointestinal, respiratory and skin infections.

In the last 12 months IFH has developed communication materials for the public aimed at showing how to put Targeted Hygiene into practise.[13] The aim is to provide an easy-to-understand framework, for building understanding of how to practise hygiene and how hygiene practices work together to protect against infection exposure.

Targeted Hygiene recognises that the major sources of harmful microbes (bacteria, viruses, fungi etc.) in HEDL settings are not places that are dirty, but the people, foods and domestic animals that occupy these spaces. Importantly, this user-centric approach communicates hygiene actions in the sequence in which the public need to receive it:

Firstly, they need to be able to recognise the moments in our daily lives when hygiene is important (e.g., handling raw foods or using the toilet);

Secondly, they need to identify the places where we need to act at that moment (e.g., hands, cleaning cloths, frequently touched items);

Finally, they need to know how to practise hygiene in those places (e.g., handwashing, surface cleaning).

Targeted Hygiene, as shown in Figure 1, recognises 9 key moments in our daily lives when harmful microbes are most likely to spread and cause infection. For each moment a simple check sheet (Figure 2) gives instructions on where and how to practice hygiene. Targeted Hygiene recognises that no single practice is 100% effective, and that hand, surface and air hygiene behaviours work together to minimise risk of transmission. Although there are other moments where we need to practise hygiene, by acting at the 9 key moments we deal with the riskiest situations for spread of harmful microbes.

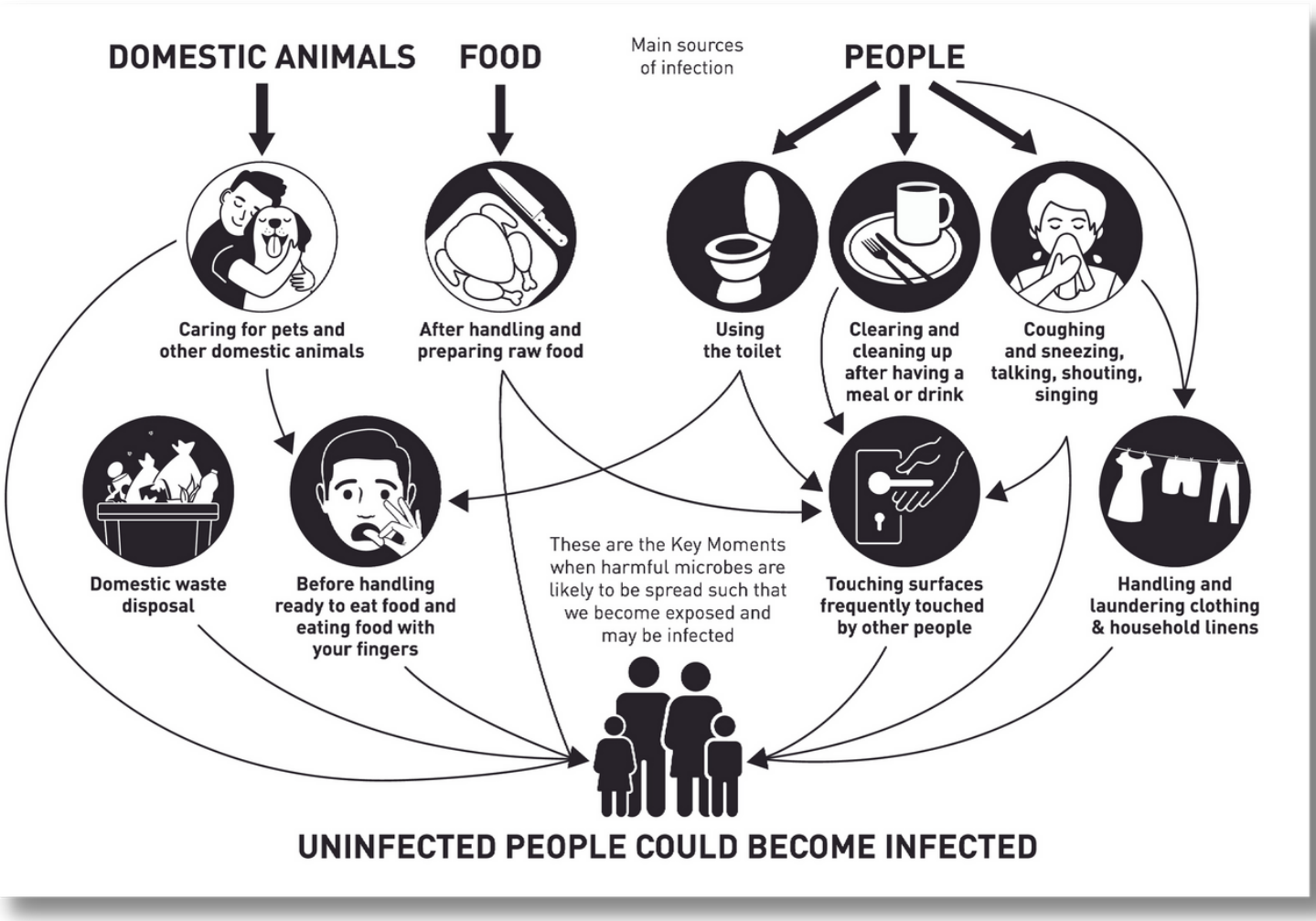


Figure 1: The key moments for hygiene in home and everyday life [13]

Figure 2: Where and how to practice hygiene at key moment 1 [13]

Checklist for cleaning or intervention		Decontaminate by*
Hands		Handwashing with soap, followed by thorough rinsing under running water or use alcohol hand sanitizer if there is no access to handwashing facilities
Surfaces touched by hands		Clean with detergent, then disinfect as directed, or use a disinfectant cleaner
Cleaning cloths		Rinse in hot soapy water, disinfect as directed and dry thoroughly
Air	Social distancing	Keep 2 metres apart from other people or meet outdoors
	Mask wearing	Wear a well fitting mask, which has at least 3 layers of material
	Ventilation	Make sure enclosed spaces are well ventilated

Notes:

Obviously, in daily life – it is not feasible to decontaminate contact surfaces every time we touch them. However, just knowing these surfaces contribute to spreading infection act as a prompt to practise good hand hygiene, to ensure you do not pass infection to others, or they to you.

What is happening - How do respiratory infections spread?

If someone has a respiratory infection, virus particles will be spread from their mouth or nose when they cough, talk loudly etc. This involves large droplets of infected mucous which travel only short distances, or tiny aerosol particles that can travel distances greater than 2-3 metres. Particles can also get onto the persons hands or settle onto surfaces. We become infected either by inhaling airborne particles or touching the mouth, eyes or lining of the nose with contaminated hands from touching surfaces etc.

Public hygiene behaviours

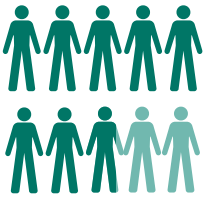
– what have we learnt from the Covid-19 pandemic?

Around 2003 when the government began to draw up preparedness plans, it was recognised that, in the event of a pandemic, public behaviour would be vital to mitigate spread before measures, like vaccines, could be developed. From March 2020, government used animations showing how the virus spread. Hygiene advice focussed on “wash your hands frequently” but gave little guidance on when and why to do this.[14] This was accompanied by advice on social distancing and contact surface hygiene.[15] Face coverings were not mandated until July 2020 due to lack of clinical evidence to support use in the community.[16,17] Advice on “hands, space, face”, was later modified to “social distancing, ventilation, face masks, hands and contact surfaces”. Giving consistent public advice was made difficult by constant, much publicised, and still ongoing, debate about the routes of transmission of Covid-19 infection, which may in turn have contributed to the erosion of public trust.[18]

In April 2022, RSPH and IFH carried out further polling‡ to assess how public perceptions and behaviours might have been shaped or reshaped by communication strategies employed during the pandemic.[19] Yonder conducted the online poll with a sample of 1730 adults from England aged 18+ between 12-14 April 2022. Data is weighted to be representative of the population of England. Developing a better understanding of hygiene is key to developing hygiene behaviour change in home and everyday life settings.

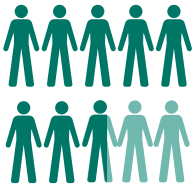
The data suggest the public clearly recognise the benefits of practicing good hygiene, a value judgement likely strengthened by the pandemic. In all, 79% agreed that Covid-19 has shown them why practicing good hygiene is important to protect against infectious diseases, and 77% agreed that they will continue to make greater effort to practise good hygiene.[19] When asked whether they “saw, heard and read too much about hygiene practices”, almost twice as many disagreed than agreed (40% versus 24%).[19]

79%



of the public agreed that the Covid-19 pandemic showed them why practising good hygiene is important to protect against infectious diseases

77%



of the public agreed that they will continue to make a greater effort to practise good hygiene following the Covid-19 pandemic

When the public were asked whether they “*saw, heard and read too much about hygiene practices*”, almost twice as many disagreed than agreed

While it is positive that the public mostly understand the importance of hygiene, in the absence of robust guidance, the 2022 survey shows they still lack clarity or awareness of when, where and how to practise appropriate hygiene. This results in ineffective and untargeted behaviours which would have little or no impact on spread of Covid-19.

Polling showed that 86-90% correctly identified after coughing and sneezing; after touching surfaces touched by others; when returning home from office, schools etc; and before eating food with fingers as important moments to wash hands.[19] However, 59% incorrectly believed that wearing gloves is an effective way to reduce virus transmission, and 31% said they could become infected with Covid-19 by penetration through the skin of their hands.[19] The reason for these beliefs is unclear but may be connected. Some may have deduced the need to wear gloves from being told to “wash hands frequently” with no clear guidance on when or why and were trying to protect themselves from Covid-19 exposure. Others likely wore gloves to prevent transmission, unaware that both gloved and ungloved hands can transmit infection to the eyes, nose, and mouth.

In addition, 57% agreed that after someone in their home has had Covid-19, it needs to be deep cleaned to get rid of the virus, and 49% said that they have started using an antibacterial cleaner for cleaning their home.[19] This inability to distinguish risk surfaces (hands and hand contact surfaces) from rarely touched, less risky environmental surfaces is unsurprising in view of media images of indiscriminate spraying of surfaces in public places.[20-22]

Public confusion is not limited to Covid-19 either: 1 in 10 respondents agreed with the statement they “do not know when or what are the most important moments to wash their hands to prevent spread of infectious diseases”.[19] At a societal level, this equates to an estimated 5 million adults who are unsure how to practise one of the most basic effective hygiene measures.[23]

What Targeted Hygiene offers

The key advantage of the Targeted Hygiene 9 moments approach is that it works to communicate effective HEDL hygiene practice. It is designed to do this in a way that way that builds cognitive understanding - rather than providing prescriptive guidance that needs memorising, it can be communicated through graphics and animations that develop hygiene understanding.[13] The 2022 poll shows that, to be effective, behaviour change strategies must be accompanied by public education on the basic concepts of Targeted Hygiene i.e., the assessment and management of risk. This must include proactive communication to dispel the idea that routine cleaning (i.e., dirt removal) can keep the home hygienic (i.e., free from infection risks).

Whilst the objective of Targeted Hygiene is to maximise protection against infection, this approach also offers other important benefits:

- Targeted Hygiene **avoids unnecessary over-use of cleaning and disinfectant products**, and single use gloves, thereby reducing environmental impacts.
- Targeted Hygiene is **more economic**. With the average household spending £140 a year on cleaning products; targeted use is a way for households to make savings.[24]
- Targeted Hygiene **advocates washing hands at the right times, rather than wearing gloves which can result in a false sense of protection** and increase disease transmission.[25,26] It can also lead to a reduction in handwashing behaviours.[27]
- Targeted Hygiene **avoids the risk of excessive hand washing** which could have arisen from advice during the pandemic to “wash your hands frequently” without guidance on when and why. This may have been responsible for reports of skin problems due to excessive handwashing, which in turn may have discouraged hand hygiene at key moments.[28,29]
- Targeted Hygiene is **less time-consuming** and less likely to lead to hygiene fatigue and failure to sustain effective hygiene behaviours.

New insights set out in this report from the polling, together with the development of the nine moments Targeted Hygiene approach, now offer the opportunity to develop a more robust communications approach to enable the public to make cognitive links between when, where, how and why to practise good hygiene, and in doing so, promote more effective and sustainable behaviours.

The way forward

This document, based on 2018 and 2021 white papers produced by a consensus group of IFH hygiene experts, and work carried out by RSPH and IFH, outlines the development of an evidence-based framework for effective daily life hygiene. [11,12] It is aimed at supporting government initiatives to build health resilience by providing clear practical guidance and developing hygiene understanding within the UK population. Adopting Targeted Hygiene at government and institutional level and communicating the key moments for hygiene offers a way to build public understanding of how to practice hygiene and how hygiene practices work together to protect against infection exposure. By contrast, continuing to practise untargeted and ineffective HEDL hygiene will be at the expense of our health, environment, and household budgets.

Data generated by our polling indicates that the public want, and would be receptive to, more hygiene guidance, but reveals that traditional methods of communication as used during Covid-19 are not fit for purpose. [19] To develop public hygiene behaviour that meets future needs, requires investment in testing Targeted Hygiene interventions using newly formulated behaviour change models such as the Health Belief Model and COM-B.[30-32]

Policy recommendations

1

A leadership team - at government agency level - is required, with sole responsibility for HEDL hygiene, and the power and investment to drive change. In particular:

- Ensuring the separate aspects of hygiene (food safety, healthcare, AMR, pandemic preparedness) are unified and communicated in a way that is user-centred
- Encouraging collaboration with heath, public health, NGOs, and household care, hospitality, cleaning, and other industries to ensure shared responsibility
- Fostering collaboration with disciplines including environmental health, food safety, AMR, education, pandemic preparedness and healthcare
- Engaging the public to practise Targeted Hygiene in public spaces as a continuum of such behaviour in their homes.

Under this leadership team, the following also need to be developed:

2

Ensure that a risk management approach is adopted to maximise protection against infection whilst also addressing other issues

- This requires engaging with stakeholders such as allergists, microbiomists, environmentalists and regulators, to foster a more balanced approach, where Targeted Hygiene (including targeted use of microbiocides) reconciles the need to protect against infection with the need to protect the environment and mitigate AMR.

3

Develop effective public hygiene behavior change strategies

- Behaviour change will not happen unless we also strengthen public understanding of hygiene and risk management
- Targeted Hygiene and behaviour change strategies must be formulated and tested for their ability to develop more effective and resilient hygiene behaviour
- Work collaboratively with stakeholders who communicate with the public to ensure clear, consistent messaging that promotes Targeted Hygiene and dispels misunderstandings about benefits of “deep cleaning”. Key stakeholders include: health and social care workers; child and adult educators; the media; the private sector (e.g., household care and cleaning industry).

References

1.There's no place like home as Britons spend extra eight hours indoors. Daily Express [Internet]. 2020 Sep 28 [cited 2022 Dec 15]; Lifestyle: [about 1.p.]. Available from: www.express.co.uk/life-style/life/1341068/ home-house-dlat-indoors-time.

2.Bloomfield SF. Hygiene resilience in public health – time for a fundamental rethink. The House [Internet]. 2022 Sep 06 [cited 2022 Dec 15]; [about 2.p]. Available from: www.politicshome.com/members/article/hygiene-resilience-in-public-health-time-for-a-fundamental-rethink.

3.HM Government. Working safely during COVID-19 in offices and contact centres [Internet]. HM Government; 2020 Nov 05 [cited 2022 Dec 15]. 42 p. Available from: https://assets.publishing.service.gov.uk/media/5eb97e7686650c278d4496ea/working-safely-during-covid-19-offices-contact-centres-041120.pdf.

4.Cabinet Office. The National Resilience Strategy – a call for evidence [Internet]. Cabinet Office; 2021 Jul 13 [cited 2022 Dec 15]. 49 p. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1001404/Resilience_Strategy_-_Call_for_Evidence.pdf.

5.Cabinet Office. Biological Security Strategy - Call for Evidence [Internet]. Cabinet Office; 2022 Feb [cited 2022 Dec 15]. 7 p. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1055196/biological-security-strategy-cfe.pdf.

6.HM Government. Tackling antimicrobial resistance 2019–2024 - The UK's five-year national action plan [Internet]. HM Government; 2019 Jan 24 [cited 2022 Dec 15]. 98 p. Available from: https://assets. publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1070263/UK_AMR_5_year_national_action_plan.pdf.

7.Royal Society for Public Health. Too clean or not too clean? The case for targeted hygiene in home and everyday life [Internet]. Royal Society for Public Health; 2019 Jun 17 [cited 2022 Dec 2015]. 19 p. Available from: https://www.rsph.org.uk/static/uploaded/06b37f30-2241-4e98-aba93fc15346e7a5.pdf.

8.Bloomfield SF. RSPH and IFH call for a clean-up of public understanding and attitudes to hygiene. Perspectives in Public Health. 2019 Nov;139(6): 285-8.

9.Royal Society for Public Health. (2018). Home Truths about Hygiene Survey [Data on file].

10.Weightman AL, Ellis S, Cullum A, Sander L, Turley RL. Grading evidence and recommendations for public health interventions: developing and piloting a framework [Internet]. NHS Health Development Agency; 2005 [cited 2022 Dec 2015]. 23 p. Available from: https://orca.cardiff.ac.uk/id/eprint/69810/1/grading_evidence.pdf.

11.The International Scientific Forum on Home Hygiene. Developing and promoting hygiene in home and everyday life to meet 21st Century needs; what can we learn from the COVID-19 pandemic? [Internet]. International Scientific Forum on Home Hygiene; 2021 Jul [cited 2022 Dec 15]. 38 p. Available from: https://ifh-homehygiene.org/developing-and-promoting-hygiene-home-and-everyday-life-meet-21st-century-needs.

12.International Scientific Forum on Home Hygiene. Containing the burden of infectious diseases is everyone's responsibility: a call for an integrated strategy for developing and promoting hygiene behaviour change in home and everyday life [Internet]. International Scientific Forum on Home Hygiene; 2018 Oct 17 [cited 2022 Dec 15]. Available from: https://www.ifh-homehygiene.org/review/containing-burden-infectious-diseases-everyones-responsibility-call-integrated-strategy.

13.International Scientific Forum on Home Hygiene. Breaking the chain of infection in our homes and everyday lives: a practical approach to encourage effective Targeted Hygiene [Internet]. International Scientific Forum on Home Hygiene; 2022 Nov 03 [cited 2022 Dec 15]. 20 p. Available from: https://www.ifh-homehygiene.org/online-learning/breaking-chain-infection-our-homes-and-everyday-lives-practical-approach-encourage.

14.Department of Health and Social Care. Public information campaign focuses on handwashing [Internet]. Department of Health and Social Care; 2020 Mar 04 [cited 2022 Dec 15]. Available from: https://www.gov.uk/government/news/public-information-campaign-focuses-on-handwashing#:~:text=Washing%20hands%20for%2020%20seconds,coronavirus%20(COVID%2D19).&text=This%20phase%20of%20the%20campaign,your%20nose%2C%20cough%20or%20sneeze.

15.UK Health Security Agency. Living safely with respiratory infections, including COVID-19 [Internet]. UK Health Security Agency; 2022 April 01 [cited 2022 Dec 15]. Available from: https://www.gov.uk/guidance/living-safely-with-respiratory-infections-including-covid-19.

16.Pyman T. Now Deputy Chief Medical Officer Jenny Harries says the evidence that masks stop the spread of coronavirus is 'not very strong in either direction'. Daily Mail [Internet]. 2020 Aug 29 [cited 2022 Dec 15]; [about 2 p.]. Available from: https://www.dailymail.co.uk/news/article-8676535/Jenny-Harries-says-face-coverings-evidence-not-strong.html.

17.Edelstein P, Ramakrishnan L. Report on Face Masks for the General Public - An Update [Internet]. DELVE Initiative; 2020 Jul 07 [cited 2022 Dec 15]. Available from: https://rs-delve.github.io/addenda/2020/07/07/masks-update.html.

18.Freeman AL, Parker S, Noakes C, Fitzgerald S, Smyth A, Macbeth R, Spiegelhalter D, Rutter H. Expert elicitation on the relative importance of possible SARS-CoV-2 transmission routes and the effectiveness of mitigations. BMJ open. 2021 Dec 1;11(12):e050869.

19.Royal Society for Public Health. (2022). Hygiene Survey [Data on file].

20.Thompson D. Hygiene Theater Is a Huge Waste of Time. The Atlantic [Internet]. 2020 Jul 27 [cited 2022 Dec 15]; [about 2 p.]. Available from: https://www.theatlantic.com/ideas/archive/2020/07/scourge-hygiene-theater/614599/.

21.Palmer M. Spray that costs pennies and kills viruses instantly could be a simple, cheap solution to Britain's Covid nightmare - as scientists ask why we're not already using it. Daily Mail [Internet]. 2020 Jul 24 [updated 2020 Aug 12; cited 2022 Dec 15]; [about 2 p.]. Available from: https://www.dailymail.co.uk/news/article-8558121/Spray-costs-pennies-kills-viruses-instantly-simple-solution-Covid-nightmare.html?ito=email_share_article-bottom%22%20%5Ct%20%22_blank.

22.Nature Editors. Coronavirus is in the air-there's too much focus on surfaces. Nature. 2021 Feb 02;590(7844):7.

23.Robards J. Principle projection – UK population in age groups [Internet]. Office for National Statistics; 2022 Jan 12 [cited 2022 Dec 15]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/tablea21principalprojectionukpopulationinagegroups.

24.De Silva A. Family spending workbook – detailed expenditure and trends [Internet]. Office for National Statistics; 2022 Jul 18 [cited 2022 Dec]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/datasets/familyspendingworkbook1detailedexpenditureandtrends

25.Yadav DK, Shah PK, Shah SP, Yadav AK. The use of disposable gloves by general public during COVID-19 increases the risk of cross-contamination. Asia Pacific Journal of Public Health. 2020 Jul;32(5):289-91.

26.Anedda J, Ferreli C, Rongioletti F, Atzori L. Changing gears: Medical gloves in the era of coronavirus disease 2019 pandemic. Clinics in Dermatology. 2020 Nov 1;38(6):734-6.

27.Fuller C, Savage J, Besser S, Hayward A, Cookson B, Cooper B, Stone S. “The dirty hand in the latex glove”: a study of hand hygiene compliance when gloves are worn. Infection Control & Hospital Epidemiology. 2011 Dec;32(12):1194-9.

28.Paton N. PPE and handwashing causing ‘spike’ in dermatitis among healthcare workers. Personnel Today [Internet]. 2020 Sep 03 [cited 2022 Dec 15]; [about 1 p.]. Available from: https://www.personneltoday.com/hr/ppe-and-hand-washing-causing-spike-in-dermatitis-among-healthcare-workers/.

29.Timms K. NHS eczema epidemic 'triggered by coronavirus hand washing'. Plymouth Herald [Internet]. 2020 Sep 06 [cited 2022 Dec 15]; [about 1 p.]. Available from: https://www.plymouthherald.co.uk/news/plymouth-news/nhs-eczema-epidemic-triggered-coronavirus-4490234.

30.Jones CL, Jensen JD, Scherr CL, Brown NR, Christy K, Weaver J. The health belief model as an explanatory framework in communication research: exploring parallel, serial, and moderated mediation. Health communication. 2015 Jun 3;30(6):566-76. 231.

31.Ackerley L. Consumer awareness of food hygiene and food poisoning. Environmental Health. 1994 Mar;102(3):69-74.

32.Michie S, Richardson M, Johnston M, Abraham C, Francis J, Hardeman W, Eccles MP, Cane J, Wood CE. The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: building an international consensus for the reporting of behavior change interventions. Annals of behavioral medicine. 2013 Aug 1;46(1):81-95.

33.Bloomfield SF, Exner M, Signorelli C, Nath KJ, Scott E. The chain of infection transmission in the home and everyday life settings, and the role of hygiene in reducing the risk of infection [Internet]. International Scientific Forum on Home Hygiene; 2012 July [cited 2022 Dec 2015]. 140 p. Available from: https://ifh-homehygiene.org/wp-content/uploads/2019/03/IFHinfectiontransmissionreviewFINAL.pdf

Footers

*Yonder conducted an online poll with a sample of 2084 adults in the UK aged 18+ in September 2018. Data is weighted to be representative of the population of England. Targets for quotas and weights are taken from the PAMCO survey, a random probability survey conducted annually with 35,000 adults. Yonder is a founding member of the British Polling Council and abides by its rules. For further information see http://www.britishpolling council.org/.

†Note, Microbiological and other data underpinning the development of Targeted Hygiene is detailed in a review by the International Scientific Forum on Home Hygiene (www.ifh-homehygiene.org).33

‡Yonder conducted an online poll with a sample of 1730 adults from England aged 18+ between 12-14 April 2022. Data is weighted to be representative of the population of England. Targets for quotas and weights are taken from the PAMCO survey, a random probability survey conducted annually with 35,000 adults. Yonder is a founding member of the British Polling Council and abides by its rules. For further information see http://www.britishpollingcouncil.org/.

This report should be referenced as follows:

Royal Society for Public Health. It's time to clean up our act on home hygiene: Embedding Targeted Hygiene for health resilience [Online] December 2022. Available at: www.rsph.org.uk/TargetedHygiene.

The Royal Society for Public Health would also like to express their thanks to the International Scientific Forum on Home Hygiene for funding the poll and development of this report.

For further information, please send an email to the RSPH Policy team at: policy@rsph.org.uk.

The report can also be accessed online at:
www.rsph.org.uk/TargetedHygiene

RSPH is a registered charity in England & Wales (Reg no. 1125949) and in Scotland (Reg no. SC040750)
Registered Office: John Snow House, 59 Mansell Street, London E1 8AN
Tel: +44 (0)20 7265 7300
Fax: +44 (0)20 7265 7301