Written Evidence Submitted by SC Johnson Professional

(C190070)

1. SC Johnson Professional is based in Denby, Derbyshire. We are part of SC Johnson & Son, a family company at work for a better world. For over 80 years under the 'Deb' name we have been providing expert skin care, cleaning and hygiene solutions for industrial, institutional and healthcare users. With over 300 employees based at our manufacturing facilities at Denby and Little Eaton in Derbyshire, we manufacture skin care products and dispensers for sale across all European countries. Our range of products includes hand hygiene, skin care, and surface disinfection products developed specifically for healthcare to be safe for high frequency use.

2. We are the largest provider of hand hygiene products - hand sanitiser and hand soaps - to the NHS. These products have been essential for frontline health care staff and first responders in the fight against Covid-19. The hand sanitiser we produce contains 80% ethanol and meets the EN14476 standard, thereby certifying that it is 'fully viricidal'. This includes effectiveness against the Coronavirus family; within the last month we have separately been able to test our product using the EN14476 standard to confirm effectiveness against SARS CoV-2, the specific strain that leads to the Covid-19 disease. In addition, as longstanding sanitiser manufacturers, we have compiled and submitted the relevant safety and efficacy data for all of our products to the relevant regulatory authorities, as required under the Biocidal Products Regulation (PT1).

3. As a direct response to the Covid-crisis, we increased our production of hand sanitiser five-fold. We moved from a 16hr/5day per week production line to a 24hr/6½ day operation over the course of a four-week period from mid-March to mid-April. We simplified our range of product offerings, reducing the number of SKUs made and prioritising those which gave us the greatest output efficiency and are most required for hospitals and other front-line organisations.

4. We continue to produce at this capacity (and beyond) as demand for our products has continued, though we are currently able to keep up with ongoing requirements from the essential services. We are continuing to invest in our sanitiser production facilities and supply chain to further increase our capacity, as we expect demand to continue above pre-pandemic levels for a significant, if not a lasting, period.

<u>The UK's readiness for future outbreaks: Business preparedness</u>

5. We are grateful for the opportunity to respond to this inquiry. **In our submission, we would like to address point (7) of the Terms of Reference: The UK's readiness for future outbreaks.** As the manufacturer of crisis-response products, dramatically needing to upscale production at short notice to meet demand at the height of the crisis was an extremely challenging experience. While individuals at the Cabinet Office were very helpful throughout the crisis period, our experience has thrown the spotlight on some external logistical factors that threaten to inhibit our ability to meet heightened demand at short notice in future, no matter the robustness of our internal preparedness plans. These are listed below, together with some suggestions as to how these risks might be mitigated. We suggest that these elements might be incorporated into an industry-wide pandemic preparedness plan which would allow for a consistent and efficient supply of crisis-response products should the need arise.

6. **Potential prioritisation of raw material to those manufacturing crisis-response products**. In our case, biocidal grade ethanol: ethanol that has been refined to a standard to make it suitable for use in hand sanitiser. We are unable to use fuel-grade ethanol (which represents 85% of the ethanol market) and, furthermore, the additional infrastructure required by fuel-grade ethanol producers to refine ethanol to a suitable standard would require significant investment costs and a timescale that is likely impractical to meet the demands of a pandemic. This meant that, during the height of the pandemic, producers of biocidal grade ethanol faced levels of demand that they were largely unable to meet. Understandably, existing producers sought to support and fulfil orders from their existing clients in the first instance. But this left those of us who manufacture healthcare grade crisis-response products facing supply shortages. We suggest that there might be scope for prioritisation of raw material suppliers to manufacturers of crisis-response products used by the NHS for a strictly short-term period at the height of any future pandemic or similar crisis.

7. **Incentivise supply of raw material to manufacturers with existing infrastructure**. We welcome the UK Government's decision to temporarily relax rules on biocidal products to allow new entrants to the market, both in terms of raw materials and finished products for consumer use. With traditional manufacturers unable to meet crisis-levels of demand we believe that this was the correct decision. However, it proved very difficult to get in contact with new raw material suppliers or to secure commercially viable commitments therefrom. Many new entrants to the market opted to both produce the raw material and develop it into finished products themselves, manufactured to the World Health Organisation's generic sanitiser formula. While we do not wish to discourage innovation, are appreciative of others' right to take advantage of commercial opportunities, and understand that there was consumer demand for such products, the reality is that it limited our own supply of ethanol and thereby threatened the supply of properly formulated EN14476 (certified viricidal) standard sanitiser to the NHS. It might be considered that, while a derogation is necessary and appropriate, there might be an incentive for raw materials to be supplied first to traditional sanitiser manufacturers who have the existing infrastructure to manufacture and deliver product efficiently, as well as provide well-formulated products that are established and recognised as safe and effective in line with existing regulations on biocidal products. In addition, existing manufacturers, such as SC Johnson Professional, have extensively developed infrastructures of hand sanitiser dispensers across healthcare organisations that enable rapid deployment of product direct to the point of care. It is the integrity of these infrastructures that is essential for pandemic planning.

8. **Protect the supply chain**. While we have very recently been able to secure long term supply of biocidal grade ethanol from a new UK producer (prior to this our primary ethanol supplies came from France), we continue to be concerned about cross-border supplies given the impact of this on UK sanitiser production across the industry in general. There was a period during the height of the crisis where it looked as though our French ethanol supplier might have been required to reserve its production for the national government, though this was ultimately resolved with help from the Cabinet Office. In addition, with many countries currently looking at how they might safeguard their supply of essential chemicals and PPE in a future pandemic, we are concerned that this issue of overseas supply may resurface again, impacting the industry as a whole. The reliance on cross-border supply could, of course, be partially or fully mitigated by incentivising UK-based companies to increase their capacity to produce biocidal grade ethanol to ensure that the UK is self-sufficient in the event of a second surge of Covid-19 or other future pandemic.

9. **Establishment of a personnel pool.** Upscaling from 16/5 production to 24/6½ requires additional personnel, who must be trained. A ready pool or database of persons that can be deployed at short notice could significantly reduce the time taken to recruit additional persons needed to rapidly expand production capacity.

10. **Consider a stockpile of product to allow for time required to upscale production**. Even with a robust business preparedness plan, we would be unable to meet substantially heightened demand overnight. A realistic estimate is a minimum four-six week delay in substantially upscaling production, given the time needed to recruit and train new employees and upscale the supply chain. A warehousing facility with a minimum three-six months' supply of sanitiser would provide a buffer to enable manufacturers to upscale their production and supply chain to ensure there are suitable supplies to match demand throughout. Our products typically have a 36-month shelf-life, but the stockpile could, of course, be drawn down by date and replenished on a regular basis.

11. **Retention of decentralised NHS supply chains.** We supply over 80% of our products directly into the NHS Supply Chain, which operates through regional depots. Early into the crisis period, this traditional supply operation was shelved in favour of a centralised NHS supply route. Unfortunately, this created problems as the sanitiser we produce is designed to be fitted into specific dispensers: they are not generic products. There were occasions when hospitals were receiving sanitiser that they could not use with their existing dispenser infrastructure. We appreciate that, towards the conclusion of the crisis period, there was a return to the original regionalised system. We would support the ongoing use of this regionalised system for sanitiser products in the event of any future pandemic or similar crisis, as it has well established supply infrastructures into hospitals at ward level.

Targeted hygiene: Supporting a step change in hygienic behaviours among the general public

12. Secondly, we would like to offer up our own expertise in targeted hygiene, as we believe that we are able to assist the Government in encouraging a step-change in hygienic behaviours among the general public that will help prevent virus transmission in any future pandemic scenario.

13. We have been working with experts – including Professor Sally Bloomfield, who chairs the International Scientific Forum on Home Hygiene (IFH) – on the development of a guide for hygiene in public places and workplaces. A 'plain' version of this guidance (omitting design features) is included in the Annex to this submission; please feel free to get in touch with us for a more user-friendly version with explanatory diagrams and pictures. Intended for employers and property managers, our guidance seeks to explain that it is the good management of public/employee behaviour that leads to both good hygiene and social distancing, and thereby a reduction in the risk of virus transmission. We focus on eight key "moments" for hygiene, when handwashing, sanitiser use or surface disinfection is recommended, which is intended to help employers both identify the best location for the provision of such facilities and consider ways in which they might encourage employees/visitors to adopt hygienic behaviour to break the chain of infection.

14. Anyone familiar with the topic of hygiene may recall the well-established '5 Moments' hygiene guidance for healthcare settings developed by the World Health Organisation, which is the guidance adhered to throughout the NHS. Our '8 Moments' hygiene guidance for non-healthcare non-domestic environments is underpinned by the same 'targeted hygiene' approach and seeks to adapt existing principles for application in spaces frequented by the public at large.

15. Our in-house experts have, over many years, carried out extensive research into prevention and control of virus transmission, compliance with hygiene requirements, and modification of employee behaviour, to support hygiene outcomes. Our research includes both hospital settings and other non-domestic environments frequented by the general public. Previous research we have undertaken with Professor Sally Bloomfield and the Royal Society for Public Health demonstrates confusion among the general public as to what "hygiene" means (vs "cleaning" for example) and what represents "risk". We therefore believe that too few people understand the importance of addressing behaviour rather than only disinfecting surfaces. We hope our guide will help workplaces, schools, retailers and similar groups navigate this topic to better identify what they need to do to support hygienic behaviour and ensure that facilities remain 'COVID-secure'.

16. Our intention is, of course, to supplement and align with existing Government guidance that recognises the necessity of hand hygiene, social distancing and surface disinfection. We believe that it is vital that people are properly educated on hygienic behaviour and how to avoid infection, which will both prevent virus transmission and help to restore public confidence in non-domestic environments. We do feel that for large facilities, a "hygiene infrastructure" comprising properly sited and installed dispensers (that cannot be removed) with clear signage and education can make a significant difference on actual, sustained behaviour. Not only will this help prevent further COVID infections, but it will leave us a healthier nation in many ways.

17. It is these fundamental and long-term shifts in behaviour that we believe are key to the country's preparedness for a future pandemic or similar crisis. We would be very happy to discuss our guidance with the relevant persons in Government and are also seeking to adapt this guidance into sector-specific materials. We would welcome any opportunity to work with persons representing the relevant sectors to help us do this.

Annex I

8 Moments for Targeted Hygiene: Guidance for Public Places and Workplaces

The Background: A Once in a Generation Opportunity

In the fight to prevent the spread of Coronavirus and because of government requirements, many public spaces and commercial facilities have seen dramatically reduced volume of people. With our communities now on a 'road out of lockdown' there is a real concern that infection rates will again start to rise. This, coupled with a heightened public awareness of the dangers posed by infectious diseases, requires the development of new, improved common approaches to hygiene, founded in clear scientific understanding of modes of transmission and targeted at preventing the spread of infections in public spaces.

Heightened awareness as a result of Coronavirus presents a once in a generation opportunity to shift emphasis and to underline the role of behaviour in ensuring hygiene and reducing risk. Everyone must be made aware that they have a role to play in preventing the spread of infection – from designers, architects, facility managers who can enable good hygiene practice, through to building occupants and the general public who must now adopt good hygiene practices. Never before in living memory has there been such a clear social and economic case to communicate, educate and adopt better hygiene standards.

The challenge of implementing better hygiene standards includes both:

- Designing and equipping buildings and public spaces today and in the future with the appropriate hygiene infrastructure to facilitate good hygiene practices, including both hand and surface hygiene and the minimisation of risks from airborne transmission.
- Educating and informing occupants and the public about what effective hygiene is and how to practice it.

Effective hygiene is not a function of places or surfaces and nor should it be confused with "cleaning" which itself has a role to play in health & well-being but which is about providing pleasant spaces. Hygiene is about preventing the spread of disease by breaking the chain of infection and is a function of behaviour. Rather than places or surfaces, hygiene should be targeted to toward scenarios – or "moments of risk" - that occur when people move in and around public spaces, interacting with them.

8 key moments where the risk of infection transmission is highest can be identified and applied generally to public spaces and workplaces as follows:

1. Entry and exit from a facility or venue
2. Using the toilet
3. Before and after touching common surfaces
4. Before preparing food
5. Before eating food, especially with fingers
6. Before and after moving from a workstation
7. After coughing, sneezing and nose blowing
8. After handling and disposal of refuse

Every facility and venue will present unique combinations of these moments and hence require a tailored hygiene solution, but the moments themselves and therefore the approach to devising that solution is common to all.

This guideline aims to explain the origin and scientific basis of the 8 Moments of Targeted Hygiene, to provide a simple approach for owners and managers to identify the moments in your facilities and to put in place the right hygiene solutions consisting of both products and awareness raising tools.

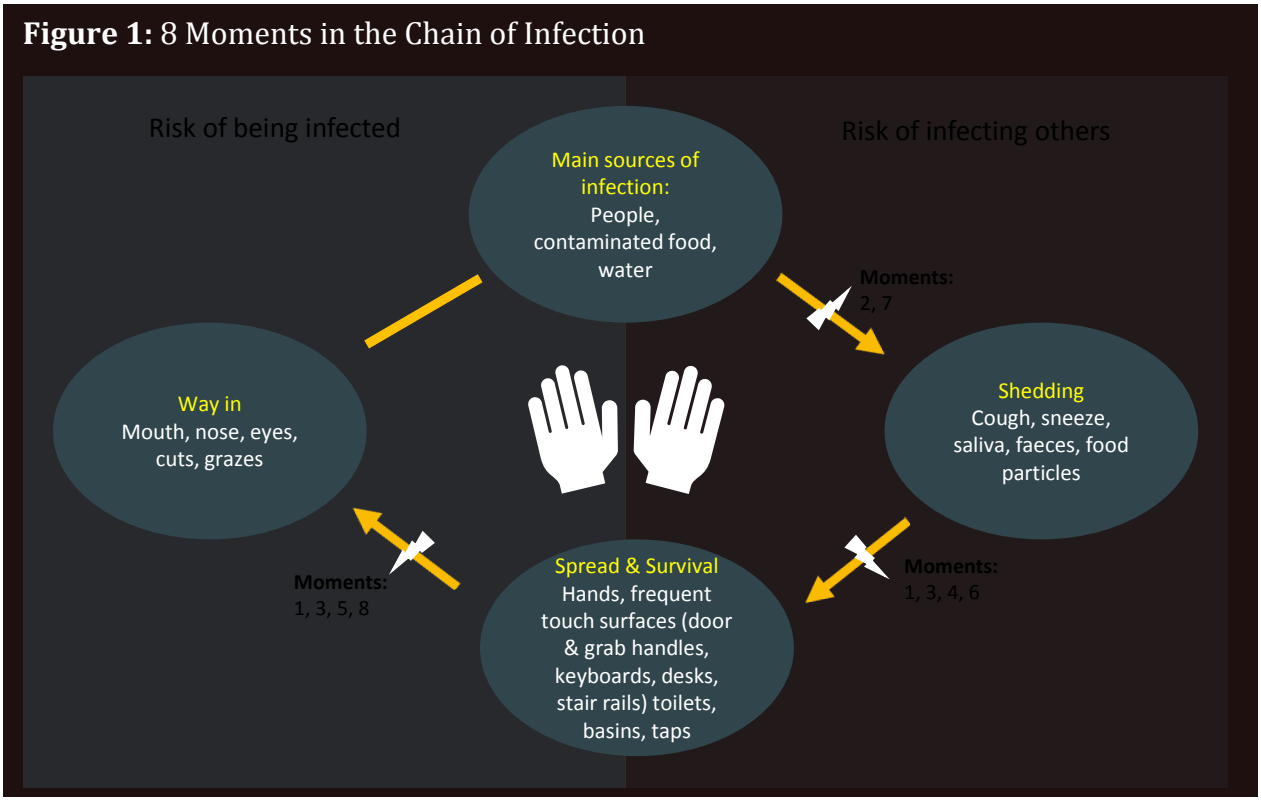
The Science: Breaking the Chain of Infection in Public Spaces

Public spaces including commercial centres, offices, manufacturing facilities, schools, gyms, transport hubs and retail centres are locations where the risk of infection transmission is high as these are the places where many different people come into contact with each other, interact and touch common surfaces.

There is a misconception that places and surfaces are inherently the points of highest risk and that disinfecting those surfaces is therefore the solution. A better way to think about infection transmission is to consider the moments at which transmission can occur and the role that people and surfaces play in those moments.

Figure 1 illustrates the "chain of infection" – the sequence of steps through which infects pass from one person to another. By targeting hygiene behaviour at the 8 key moments, we can break the chain of infection – either by eliminating the risk of infecting others, or by reducing the risk of becoming infected.

Figure 1: 8 Moments in the Chain of Infection



Outside direct contact with airborne pathogens – mitigated by social distancing - the primary mode of infection transmission is via our hands which spread pathogens from infected individuals to other people and surfaces, and which can become contaminated after touching common shared surfaces

such as door handles, stair rails, etc. Critically, it is not the surfaces themselves that create the risk but the behaviour of touching those surfaces without practicing hand hygiene. While regular disinfection of frequently touched surfaces does play a role in managing risk, it cannot alone create a safe environment since re-contamination may occur frequently.

Supporting behaviour change toward a culture where the risk moments are clear to all and where targeted hygiene is practiced at those moments is best way to minimise risk and create safe, healthy public spaces and workplaces.

The Practice: How to Target the 8 Moments

Targeting these key moments can be achieved by designing and equipping buildings with the right hygiene infrastructure and educating individuals about the dangers they pose to themselves and others if they do not adopt better practices.

The steps include:

a. Follow the guidance of local government and regulatory agencies.
b. Follow a standardised methodology to identify where the key risk moments occur in your facility.
c. Install hygiene infrastructure that incorporates hand-washing and sanitising facilities at all key locations where hygiene moments may occur. For example, ensure handwashing facilities or sanitiser stations are placed at entry and exits points, near to frequent-contamination surfaces (e.g. stairs, escalators, lifts, etc), near to food preparation and eating locations and within W/Cs.
d. Educate and raise awareness with occupants and visitors of the 8 moments of hygiene and ensure high visibility and intuitive use of hygiene facilities. A range of media including posters, signage, videos and audio reminders may be used.
e. Provide suitable hand wash and sanitiser products that comply with local regulations and standards and that are proven to remove or de-activate viruses. In the UK, this should include products that are proven to meet the requirements of the EN14476 - standard for virucidal efficacy.
f. Ensure that hand wash and sanitiser dispensers are regularly monitored and adequately replenished.
g. Consider provision of personal hand sanitiser packs to employees who may encounter hygiene moments away from established locations (e.g. janitorial staff removing refuse or logistics staff driving vehicles off-site).
h. Disinfect frequent-contact and food-contact surfaces using a suitable disinfectant solution that complies with local regulations and is proven to remove or de-activate viruses. The frequency of disinfection should reflect the fact that the greatest risk is whilst the work force is present in the building due to the frequency of contact. Increase frequency of disinfection for the highest-risk surfaces.

Routine cleaning of low-risk, non-touch surfaces should be considered a different activity from ensuring workplaces and public spaces remain hygienic – the removal of dirt, debris, allergens etc does not protect the people against infections, but provides a pleasant space.

Your Checklist: Implementing the 8 Moments Approach

Listed below are the moments alongside suggested actions individuals should take and critically the responsibilities of facility managers to provide appropriate infrastructure (products plus education) to enable these actions.

Risk Moments	Purpose	Actions for Facility Managers	Education for Individuals
Entering the facility **Exiting the facility**	To prevent you contaminating the work environment To protect you from contamination from others via surfaces	Ensure access to hand washing facilities or hand sanitiser on entry and exit points	Wash hands with soap & water or use a suitable hand sanitiser if washing facilities are not available
Before leaving your workstation **After returning to your workstation**	To prevent you contaminating the environment To protect you from contamination from others picked up from hand contact surfaces	Ensure access to hand sanitisers at all workstations	Sanitise your hands before leaving your workstation Sanitise your hands when returning to your workstation
Touching surfaces frequently touched by other people (e.g. door handles, stair rails, grab handles, turnstiles, barriers, ticket machines, etc)	To prevent you from spreading infection to others To protect you from getting infected	Provision of hand sanitiser at internal doors, lifts, staircase exits and other identified common touch points. Daily disinfection of frequent touch surfaces.	Avoid touching common surfaces where possible. Wash hands with soap and water or use a suitable hand sanitiser immediately after touching. Minimize touching your face.
Food preparation (for employees in food service establishments)	To protect you from foodborne infection and food from contamination by you To protect food from contamination	Ensure access to correctly placed hand washing facilities or hand sanitiser. Ensure food preparation areas and utensils are frequently disinfected	Wash with soap and water if hands are visibly dirty or use a suitable hand sanitiser, immediately after handling raw food Sanitize ALL food contact surfaces after preparing raw foods and before “preparing” ready to eat foods e.g sandwiches. Utensils and cleaning cloths are also critical surfaces at this moment.
Before eating food, especially with fingers	To protect you from infection	Ensure hand washing facilities with reminders for users Ensure that food is consumed in a safe area and that there is access to hand sanitiser	Wash hands with soap and water if hands are visibly dirty or use a suitable hand sanitiser immediately before eating
Using the toilet	To prevent self-infection and transmission of infection from you to others who use the toilet facilities	Ensure hand washing facilities with reminders for users Frequently disinfect hand contact surfaces	Wash hands with soap and water immediately after using the toilet. Disinfect hand contact surfaces using

Risk Moments	Purpose	Actions for Facility Managers	Education for Individuals
			disinfectant wipes
Coughing, sneezing, nose blowing and face touching	To prevent transmission of infection from you to others	Ensure access to hand sanitiser at workstations Ensure safe disposal facilities and remove safely from workplace	Cough or sneeze into a tissue or fold of your arm. Wash hands with soap and water, if hands are visibly dirty, or use a suitable hand sanitiser, immediately after coughing, sneezing or blowing your nose Dispose of tissues in a suitable refuse container
Handling and disposing of refuse	To prevent transmission of infection from refuse to you and other surfaces	Ensure hand washing facilities with reminders for users	Wash hands with soap and water if hands are visibly dirty or use a suitable hand sanitiser immediately after handling refuse

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SC Johnson Professional has worked with leading experts and the International Forum on Home Hygiene (IFH) to develop the "8 Moments of Hygiene for Public Spaces" as a simple, practical approach to help facility owners and managers implement best practices to create safe environments away from home. The 8 moments guideline is founded in the principles of Targeted Hygiene that was proposed by Prof Sally Bloomfield and is supported by IFH, builds on the "9 Moments for Home Hygiene" guideline published jointly by IFH and the Royal Society for Public Health in 2019.

(30 July 2020)