

# Coronavirus (COVID-19) infection – what you can do to protect yourself against infection – and how to make sure you do not spread infection to others

# Updated 24th March 2020

On March 23<sup>rd</sup>, the government announced new strict measures for "social distancing" which will apply to all of us - the general public – and will remain in force for the next 3 weeks at least. This is in addition to the separate advice already issued on specific situations such as advice for households who are self isolating, and advice for the most vulnerable who need to be shielded.

Using currently available government documents, this advice sheet summarises the various (and varying) situations in which you may find yourself in the coming weeks in your home and everyday lives, whether you are infected, self isolated, belong to a vulnerable group, or are trying to carry on with working in the community whilst also caring for yourself and others.

For each group this advice sheet summarises the general advice being given on how to comply with "social distancing" whilst also fulfilling family and work responsibilities. It also gives guidance on the hygiene measures which will best protect you from getting infected and prevent those who become infected from spreading their infection to other people. These measures are vital to halt the spread of the outbreak.

### **Background Information**

#### How are respiratory viruses like coronavirus spread?

Understanding and adapting your lifestyle to prevent spread of COVID-19 infections depends on understanding how the virus is being spread. It is currently assumed that the routes of transmission from person to person are the same as for colds, SARS and influenza viruses, although data, mostly emerging from what has happened in Wuhan, China, suggests that there are some significant differences, which may in time explain why this virus infection is spreading so rapidly:

**Droplet transmission** occurs when the infected individual directly sprays large droplets of infected mucous by coughing or sneezing, which propels the droplets onto conjunctiva of the eye of an uninfected person (the virus enters the tear fluid and drains down a duct into the nose) or the lining of their nose or into their mouth where it invades the tissues, multiplies and causes infection. This transmission route requires close face-to-face contact with the infected individual – hence the "2 metre "social distancing" advice.

**Contact transmission** involves hands and surfaces. Infected droplets of mucous can be deposited on surfaces (either by settling of airborne droplets or being touched with contaminated fingers). These droplets are invisible to the naked eye. Anyone can pick up the virus if they touch a contaminated surface or shake hands with an infected person with contaminated hands. They can become infected if they rub their eyes or the lining of their nose or their mouth with contaminated hands, where it invades the tissues, multiplies and causes infection.

The virus may remain infectious for up to 72h outside a human body, although infectivity declines over time. Infectivity is greatest immediately after it is expelled from the infected person. Surfaces most likely to spread droplets of infected mucous shed from the nose include frequent touch surfaces such as handkerchiefs and tissues, tap and door handles, telephones, mobile devices, television remotes etc. This is why social distancing is important and why hand and hand contact surface hygiene should focus on e.g hand contact surfaces frequently and RECENTLY touched by others

**Airborne transmission** involves very small infected droplet nuclei (droplets of size  $< 5\mu$ m) which are expelled into the air from the infected person by sneezing. The droplets can spread via air currents, and settle from the air slowly onto surfaces. During this time the virus can be drawn down directly into the lungs where they cause infection. How long the virus remains infectious in droplet nuclei is not known, but the viruses will gradually die out. At present it is thought that airborne transmission is not an important route of spread from COVID-19

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**Faecal:oral transmission.** <u>It has been suggested</u> that, as for SARS, this COVID-19 may also "infect" the gut, which means that faecal oral transfer may be possible. At present however there is no good evidence to confirm or refute this.

Loss of sense of smell: There is evidence from South Korea, China and Italy that significant numbers of patients with proven COVID-19 infection, and an increasing number of asymptomatic people (i.e. people without cough or other clinical symptoms) are reporting loss of sense of smell and taste. This suggests that the virus may be replicating in nasal tissue and the infection can be transferred to other people before they are aware they are infected. This may be a reason why COVID-19 has spread so rapidly compared to SARS. Since the carrier is not expelling respiratory droplets (i.e. not coughing) it suggests that the early undetected transmission is via hands and surfaces.

#### But REMEMBER as far as hygiene is concerned and how you prioritize what you do:

- COVID-19 can only "breed" inside human or animal cells it cannot multiply on environmental surfaces and will gradually lose its infectivity over time
- This means that COVID-19 will only enter your home when someone comes in who is infected or on an item you bring in is contaminated. Unfortunately, some people may be infected but not have any symptoms. As the total number of cases in your community increases, the chance of an infected person entering your home will increase. This is why it is important to practice good hygiene regardless of the current health of your family and anyone else who needs to enter your home
- You can ONLY become infected if a sufficient number of infectious virus particles come into contact with your mouth, nose or eyes
- You can best protect yourself by focusing on measures such as hand hygiene, hygiene of surfaces frequently and recently touched by other people and good respiratory hygiene which will have the maximum impact on preventing infection. Trying to "deep clean your home" will have little or no impact, but do go round and disinfect all frequently touched surfaces.
- For most people COVID-19 will be a mild infection. Currently children with COVID-19 appear to be less severely affected.

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International Scientific Forum on Home Hygiene
(www.ifh-homehygiene.org)

# UK Government Advice on what we must do to prevent spread of COVID-19 infection

Public health agencies worldwide believe that the support of the public is crucial – particularly in delaying the spread of the pandemic. Tackling this is everyone's responsibility! – not least to protect those who are at greater risk of serious or life-threatening infection and ensuring that the NHS can meet their treatment needs!

On March 23<sup>rd</sup>, UK government has announced new strict rules for "social distancing" which will apply to all of us - the general public – which will remain in force for the next 3 weeks at least. This is in addition to the advice sheets (see below) already issued on specific situations such as households who are self isolating, and for the most vulnerable who need to be shielded. The new guidance (see <u>https://www.gov.uk/government/publications/full-guidance-on-staying-at-home-and-away-from-others</u>) rules that everyone should stay at home, and ONLY leave home for one of the four following reasons:

- Shopping for basic necessities, for example food and medicine, which must be as infrequent as possible.
- One form of exercise a day, for example a run, walk, or cycle alone or with members of your household.
- Any medical need, or to provide care or to help a vulnerable person.
- Travelling to and from work, but only where this absolutely cannot be done from home.

Even then, we should minimise time spent outside the home and stay 2 metres apart from anyone outside our immediate household.

# How do we implement UK Government Advice?

Using currently available government documents, the following Table summarises the main (and varying) situations in which you will find yourself in the coming weeks in your home and everyday lives - infected, self isolated, belonging to a vulnerable group, or trying to carry on with working in the community whilst also caring for yourself and others. For each situation it summarises the general advice being given on how to comply with "social distancing" whilst also fulfilling family and work responsibilities. It also gives guidance on the hygiene measures which will best protect you from getting infected and prevent those who become infected from spreading their infection to other people. These measures are vital to halt the spread of the outbreak.

Note: The following social distancing advice is based on UK current policy but the hygiene practice advice is applicable in all countries.

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# What category do I fall into - and what should I do?

There are 3 basic categories of situations. Start by identifying which general category and situation you currently fall into – and follow the social distancing and hygiene advice relevant to your situation

But - remember there is no such thing as zero risk – the following advice is aimed at maximizing risk reduction, based on current knowledge. If it's just not possible to follow this advice until you can get additional support from social services or your community network, this does not mean you will get infected – it just increases the risk. So don't panic - have a think - then adapt the advice to what you can achieve with the resources and support you have available

1. Home situations where someone is infected or has been in contact with an infected person				
Situation	Social distancing policy to be adopted	Hygiene advice for that situation		
People who are infected with COVID-19 and are living in their home in their community See more details**	Strict self-isolation, do not leave your home for at least 7 days from when symptoms started. "Social distancing" (more details*) means staying in an isolated room if possible and having only essential contact with others in your household and carers.	<ul> <li>Practice rigorous hygiene:</li> <li>Good respiratory hygiene (section 1)</li> <li>Prevent spread of infection to others through rigorous hand hygiene and hygiene of surfaces, clothes, household linens etc. likely to be touched by other family members (section 2)</li> </ul>		
People living with/caring for someone who is infected See more details**	Have only essential contact with the infected person. Also practice "social distancing"* (2 metres) within your household group as far as possible. Strictly avoid touching your eyes nose and mouth. Behave as if you are infected even if you are not showing symptoms Do not leave the house for <b>14 days</b> starting from the day when the infected person became ill. Arrange for delivery of essentials	<ul> <li>Practice rigorous hygiene</li> <li>Good respiratory hygiene in case you might also be infected but not yet showing symptoms (section 1)</li> <li>Practice good hygiene to avoid becoming infected and help prevent spread infection to any other family members (section 3)</li> </ul>		

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People who are infected with a respiratory illness but not yet confirmed as COVID-19 See more details**	Strict self-isolation. Do not leave your home for 7 days from when the symptoms started "Social distancing"* means staying in an isolated room if possible and having only essential contact with others in your household and carers.	<ul> <li>Practice rigorous hygiene:</li> <li>Good respiratory hygiene (section 1)</li> <li>Prevent spread of infection to others through rigorous hand hygiene and hygiene of surfaces, clothes, household linens etc. likely to be touched by other family members (section 2)</li> </ul>
People who are living with/caring for someone who is infected with a respiratory illness but not yet confirmed as COVIC-19 See more details**	Have only essential contact with the infected person. Practice "social distancing"* (2 metres) within your household group as far as possible. Strictly avoid touching your eyes nose and mouth. Behave as if you are infected - even if you are not showing symptoms. Do not leave the house for <b>14 days</b> starting from the day when the first person in the house became ill. Arrange for delivery of essentials	<ul> <li>Practice rigorous hygiene</li> <li>Good respiratory hygiene in case you might also be infected but not yet showing symptoms (section 1)</li> <li>Practice good hygiene to avoid becoming infected and help prevent spread infection to other family members section 3)</li> </ul>
People who are self isolated because of contact with an infected person	Self-isolation. Do not leave your home for 7 days after contact with the infected person Social distancing* means staying in an isolated room as far as possible and having only essential contact with others in the home. Behave as if you are infected - even if you are not showing symptoms. Self-isolation, do not leave your home for 14 days. Arrange for delivery of essentials. Outdoor exercise – not a good idea – but its only 7 days	<ul> <li>Practice good hygiene</li> <li>Good respiratory hygiene (section 1)</li> <li>Prevent exposure to infection to others through rigorous hand hygiene and hygiene of surfaces, clothes, household linens etc. likely to be touched by other family members (section 2)</li> </ul>
People who are living with/caring for someone who has had contact with an infected person	Have only essential contact with the contact person. Practice "social distancing"* (2 metres) within your household group as far as possible. Behave as if you are infected even if you are not showing symptoms. Self-isolation, do not leave your home for 14 days. Arrange for delivery of essentials Outdoor exercise – not a good idea – but its only 14 days	<ul> <li>Practice good hygiene</li> <li>Good respiratory hygiene in case you might also be infected but not yet showing symptoms (section 1)</li> <li>Practice good hygiene to avoid becoming infected and prevent spread of infection to other family members (section 3)</li> </ul>

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People who are self isolated because they are in a "extreme high-risk group"		
People who are living with/caring for someone in an extreme high- risk group		
People who have self isolated because they are in an "at risk" group (see below for definition of at risk group**)	Social distancing* particularly strongly advised - from those you live with. Stay at home and do not invite other friends and family into your home – use social media to stay in contact. Arrange for delivery of essentials. Leave home only if it cannot be avoided for obtaining essential or for medical needs. Take exercise in the fresh air alone or with members of your household.	<ul> <li>Practice good hygiene</li> <li>Good respiratory hygiene (section 1)</li> <li>Prevent spread of infection to others through rigorous hand hygiene and hygiene of surfaces, clothes, household linens etc. likely to be touched by other family members (section 3)</li> <li>Protect yourself from being infected whilst away from home (section 4)</li> </ul>
People who are living with/caring for someone who is in an "at risk" group	Practice social distancing* from the at risk person/s you are living with as far as possible. Stay at home. Do not invite other friends and family into your home – use social media to stay in contact. Arrange for delivery of essentials. Leave home only for essential reasons – for work or medical needs – and if it cannot be avoided – for food shopping and prescription collection. Take exercise in the fresh air alone or with members of your household.	<ul> <li>Practice good hygiene</li> <li>Good respiratory hygiene (section 1)</li> <li>Prevent spread of infection to others through rigorous hand hygiene and hygiene of surfaces, clothes, household linens etc. likely to be touched by other family members (section 3)</li> <li>Practice rigorous hygiene when you are away from home and at work. (section 4)</li> </ul>

3, The "general public"		
The general public – who do not fall into any of the above categories but who are carrying out jobs away from home****	Work from home if you possibly can. Practice social distancing* and good hygiene with those you work with. Reduce social contact as much as possible. Do not invite other friends and family into your home or visit with friends - use social media to stay in touch. Arrange for delivery of essentials if possible. Leave home only for essential reasons i.e work or medical needs, or to provide care or support to a vulnerable person, and, if e unavoidable, food shopping and prescription collection. Take exercise in the fresh air alone or with members of your household.	<ul> <li>Practice good hygiene at home and at work</li> <li>Good respiratory hygiene (section 1)</li> <li>Prevent spread of infection to others through rigorous hand hygiene and hygiene of surfaces, clothes, household linens etc. likely to be touched by other family members (section 3)</li> <li>Practice rigorous hygiene when you are away from home and at work. (section 4)</li> </ul>
The general public – who do not fall into any of the above categories	Practice social distancing* as far as possible from those you live with. Do not invite other friends and family into your home contact or visit with friends - use social media to stay in touch. Arrange for delivery of essentials if possible. Leave home only for essential reasons i.e for medical needs, or to provide care or support to a vulnerable person, and - if it cannot be avoided – for food shopping and prescription collection. Take exercise in the fresh air alone or with members of your household.	<ul> <li>Practice good hygiene at home</li> <li>Good respiratory hygiene (section 1)</li> <li>Prevent spread of infection to others through rigorous hand hygiene and hygiene of surfaces, clothes, household linens etc. likely to be touched by other family members (section 3)</li> <li>Protect yourself from being infected whilst away from home (section 4)</li> </ul>

\* Additional "Guidance on social distancing for everyone in the UK" <u>https://www.gov.uk/government/publications/covid-19-guidance-on-social-distancing-and-for-vulnerable-people/guidance-on-social-distancing-for-everyone-in-the-uk-and-protecting-older-people-and-vulnerable-adults</u>

\*\* Guidance on social distancing for everyone in the UK <u>https://www.gov.uk/government/publications/covid-19-guidance-on-social-distancing-and-for-vulnerable-people/guidance-on-social-distancing-for-everyone-in-the-uk-and-protecting-older-people-and-vulnerable-adults</u>

\*\*\* Guidance on shielding extremely vulnerable persons <u>https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-</u> extremely-vulnerable-persons-from-covid-19/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19

\*\*\* If you work in a critical sector outlined in this guidance, or your child has been identified as vulnerable, you can continue to take your children to school. Where parents do not live in the same household, children under 18 can be moved between their parents' homes

### Hygiene practice Advice

The following is advice on what to do in the situations you will find yourself in order to make the greatest reduction in the risk of getting and spreading infection. Using the table above – find out which of the following sections give hygiene advice relevant to your situation. If you can comply with this advice you can really make a difference.

Below you can also find a Blog which is being built by the HygieneDoctor. The aim of the blog is to answer specific questions raised socially in her life, in numerous phone-ins on the radio and by the media

# Section 1 "Good respiratory hygiene" (catch it, bin it, kill it)

All family members must practice good respiratory hygiene to reduce risks of spread to other family members. It is important that everyone does this because data now shows that we may be spreading infection before we are aware of any symptoms of illness:

- avoid touching your nose as much as possible to reduce risks of spreading the virus via your hands or the surfaces you touch.
- block coughs or sneezes preferably with a tissue, or if you don't have a tissue, use the crook of your arm to save your hands from becoming contaminated
- use disposable tissues rather than a cotton handkerchief to blow your nose. Dispose of tissues immediately and 'safely'. DO NOT leave them lying around for other people to pick up and become infected.
- wash your hands thoroughly using soap and water. Make sure you use good mechanical action and rinse your hands under clean running
  water to remove any infected mucus. Make sure your hands are dry, as wet or moist hands are more likely to spread the virus. To learn how
  to wash your hands properly go to <a href="https://youtu.be/LGasejm3\_9c">https://youtu.be/LGasejm3\_9c</a>
- If a washbasin is not available, use a hand sanitiser\* to clean your hands.

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# Section 2. Measures to prevent spread of infection from an infected person to family members and family carers

- Do not leave home. Keep to your room as far as possible keep the door closed avoid close contact with other family members. Keep the room well ventilated.
- If this is not possible stay at least 2 metres (3 steps) away from other people. This may be difficult for parents with young children.
- Sleep in a separate bed/couch from your partner
- When leaving your room wash your hands or use a hand sanitizer before leaving your room and avoid touching surfaces frequently touched by others as far as possible
- If you do need to share a bathroom and toilet with other family members:
  - clean them after you have used them every time (for example, wiping surfaces you have come into contact with). Another tip is to consider drawing up a rota for bathing, with you using the facilities last, before thoroughly cleaning the bath, sink and toilet yourself.
  - do not share your towels, facecloths, toothbrushes, eating utensils, etc. with other family members.
  - Use your own toothbrushes, eating and drinking utensils (including cups and glasses in the bathroom and bedroom), dishes, drinks, towels, washcloths or bed linen.
- Wash your laundry (especially handkerchiefs, towels, face-cloths) used by ill people separately from other laundry, and at a higher temperature (at least 60°C) preferably with a laundry product containing active oxygen bleach (see back of pack ingredients) to ensure viruses are inactivated. Wear clothing that can be laundered at 60°C.
- If you share a kitchen with others, avoid using it while others are present. Take your meals back to your room to eat. If you have one, use a dishwasher to clean and dry your used crockery and cutlery. If this is not possible, wash them using your usual washing up liquid and warm water and dry them thoroughly, remembering to use a separate tea towel. Keep them separate from other family eating/drinking utensils
- do not prepare food for others.
- Personal waste (such as used tissues) and disposable cleaning cloths can be stored securely within disposable rubbish bags. These bags should be placed into another bag, tied securely and kept separate from other waste within your own room. This should be put aside for at least 72 hours before being put in your usual external household waste bin.
- If you have your own garden it is fine to use it as long as you keep 2 metres away from other members of your household. If possible, they should use the outside area separately.

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# Section 3. Measures to prevent yourself becoming infected and prevent spread of infection amongst family members

- As far as possible stay at least 2 metres (3 steps) away from other people. This may be difficult for parents with young children.
- Wash your hands regularly, avoid touching your mouth, eyes, and nose.
- Remember that, together without hands, the virus is most likely to spread to other people in the home via surfaces that are frequently touched by hands such as computer keyboards, TV remotes, telephones, door handles tap handles, toilet seats and flush handles etc. so disinfect these high frequency touch surfaces daily with a suitable disinfectant product or wipe that kills viruses\*\*.\*\*\* or if this is not possible (e.g the surface or object would be damaged) avoid touching the surface at all, if possible.
- Wash your hands before handling ready to eat foods and before eating with your fingers
- If you share a bathroom and toilet with other family members:
  - Do not share your towels, facecloths, toothbrushes, eating utensils, etc. with other family members.
  - Use your own toothbrushes, eating and drinking utensils (including cups and glasses in the bathroom and bedroom), dishes, drinks, towels, washcloths or bed linen.
  - Clean the bathroom daily particularly surfaces which come into contact with your hands toilet seat, flush handle, taps, door handle after you have used them every time (for example, wiping surfaces you have come into contact with).
- Wash your laundry (especially handkerchiefs, towels, face-cloths) used by ill people separately from other laundry, and at a higher temperature (at least 60°C) preferably with a laundry product containing active oxygen bleach (see back of pack ingredients) to ensure viruses are inactivated. Wear clothing that can be laundered at 60°C. Wear clothing which can be washed at these temperatures
- Clean and disinfect the toilet daily (the virus may be present in your faeces particularly surfaces which come into contact with your hands toilet seat, flush handle,
- Cleaning cloths and sponges can readily spread viruses from one surface to another. Make sure that cloths are disinfected immediately after each use using a bleach disinfectant or other disinfectant that kills viruses\*\*. Thoroughly dry the cloth until next use. Alternatively use a disposable cloth or wipe.

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# Section 4. Preventing spread of infection when you are away from home

There are a number of things you can do to help protect yourself from becoming infected in situations where social distancing becomes difficult or impossible – which can really work.

#### Social distancing:

- Avoid spending unnecessary time in crowded places (particularly indoors) which is where the virus will spread most easily
- Do your essential shopping etc at times when supermarkets are less crowded
- Walk instead of using public transport or travel at off peak times

For many people, avoiding crowded places is not possible if they are to continue their daily employment, Crowded places can range from offices and schools to airports, trains and aeroplanes.

#### It's about breaking the chain of infection – or stopping the journey of the germ!

Wherever you are, but particularly in crowded places, there are many things you can do to reduce the risk of being infected.

- Avoid shaking hands with people you meet fist/elbow bumps are an alternative way to greet people
- Don't panic but avoid touching handrails and door handles where possible
- Wash your hands frequently or use a hand santizer\*. It is impossible to define what is meant by "frequently", but there are certain times when it is obvious. e.g as soon as you get to work or arrive home, always after moving around in the cabin on a flight etc. Carrying a hand sanitizer with you at all times is a good idea. It means you can practice good hand hygiene when you need to even if you do not have access to soap and running water.
- Avoid touching your eyes, nose and mouth as much as you can particularly when you are e.g in a supermarket and touching things every few seconds. So for example, sanitize your hands when you enter the supermarket (i.e. don't take your virus in with you) and then immediately you leave – and don't touch your eyes nose or mouth when you're in there. Avoiding touching your eyes, nose and mouth takes focus. Research shows we do this all the time without even realising. But it has BIG results in reducing your risk of getting infected if you can do it.

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- If you are travelling in a confined space for a significant period of time with a lot of people (long haul flight or train journey) use a "cold and flu defence nasal spray" (available from Pharmacies). Use it prophylactically before during and after your journey. This helps ensure that if you transfer any virus to the mucosa of the nose without knowing, it will prevent the virus from infecting via this route
- In an aircraft, keep the personal ventilation system going above your seat. This help to ensure that any viruses circulating around you are directed away from you down to the floor of the cabin
- Keep your work-space well ventilated
- Health agencies are not advising people to wear face masks in order to reduce the risk of breathing in the virus. However, wearing a face mask could help to reduce risks of being infected by preventing you from touching the lining of your nose with your fingers.
- Wash your hands immediately when you arrive home

#### **Disinfectants and hand sanitizers**

\*Waterless hand sanitizers (also called hand rubs) which are effective in inactivating respiratory viruses on the hands include alcohol-based gels (or other products) containing not less than 62% v/v alcohol. Not all products are effective against viruses, so check the label.

\*\*Disinfectants and disinfectant cleaners – If you use a disinfectant, (disinfectant, disinfectant/cleaner, disinfectant spray or wipe) use a product such as a bleach-based product, which is active against respiratory viruses. Check the claims on the labels to be sure. To use bleach (hypochlorite) products as a surface disinfectant, dilute to 0.5% w/v or 5000 ppm available chlorine. Household bleach (both thick and thin bleach) for domestic use typically contains 4.5 to 5.0% w/v (45,000-50,000 ppm) available chlorine. Bleach/cleaner formulations (e.g. sprays or wipes) are formulated to be used "neat" (i.e. without dilution).

\*\*\*alcohol wipes – containing 70%v/v alcohol are useful for disinfecting "delicate" or small surfaces.

#### COVID-19 (coronavirus): hygiene tips from the Hygiene Doctor

Over the last weeks, we have been listening to concerns, studying research papers and evaluating Government advice about what to do in this current crisis. Dr Lisa Ackerley (The Hygiene Doctor and Vice Chairman of IFH) has started a blog at <a href="http://thehygienedoctor.co.uk/2020/03/20/hygiene-tips/">http://thehygienedoctor.co.uk/2020/03/20/hygiene-tips/</a> which she is building to address question raised socially in her life, and in numerous phone-ins on the radio and questions being asked by the media. The aim is to reinforce the above practical advice and come up with simple suggestions and practical tips on specific issues not covered in the above advice where people are uncertain about what to do.

#### For information on scientific evidence underpinning this advice sheet go to:

- Sattar S. Human Pathogenic Coronaviruses: Understanding their Environmental Survival for better Infection Prevention and Control, a review by Dr. Syed Sattar. http://www.cremco.ca/en-US/news/1044
- Kampf G, Todt D, Pfaender S, Steinmnann E. <u>Persistence of coronaviruses on inanimate surfaces and its inactivation with biocidal agents.</u> J Hosp Infect. 2020 Feb 6. pii: S0195-6701(20)30046-3. doi: 10.1016/j.jhin.2020.01.022. [Epub ahead of print]
- van Doremalen N, Bushmaker T, Morris D, Holbrook M, Gamble A, Williamson B, Tamin A, Harcourt J, Thornburg N, Gerber S, Lloyd-Smith J. Aerosol and surface stability of HCoV-19 (SARS-CoV-2) compared to SARS-CoV-1. medRxiv. 2020 Jan 1. https://www.medrxiv.org/content/medrxiv/early/2020/03/10/2020.03.09.20033217.full.pdf

The International Scientific Forum on Home Hygiene (IFH, <u>www.ifh-homehygiene.org</u>)

is a not-for-profit educational trust which is working to develop and promote hygiene in home and everyday life based on sound scientific evidence

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