

HOW TO SPRAY FOR CLEANING & DISINFECTING

As we return to work after the Covid-19 epidemic lockdown is lifted, companies have a responsibility to ensure that workplaces are as safe as possible for their employees. Businesses whose work involves treating or dealing with customers, clients or patients face-to-face want their customers to be confident their safety is a priority. In order to get the world back to work, effective cleaning and disinfection will be high on the agenda.

What do we know?

As this is a new virus there are still many unknown factors. Research indicates, however, that the main transmission mode of the virus is by direct human to human contact. Secondary transmission modes would seem to be through contact with contaminated surfaces and, to a lesser degree, through contaminated air space.

What can we do?

We need to treat surfaces and possibly target the virus in the air. Spraying offers an effective means of cleaning and disinfecting and there are a range of different sprayers and spraying systems (see box below).

All official advice points to a 2-Step process:
CLEANING **and** DISINFECTING.

1. Cleaning uses soap or other detergents and water to remove stains, bacteria, dust etc from a surface. This removes material that might shield the virus and the virus itself.

2. Disinfecting uses disinfectants to kill any remaining viruses or bacteria which may be on surfaces or in the air.

You should not mix chemicals so use separate sprayers (these can be different depending on what your premises are used for) for the cleaning and disinfecting operations.

HOW TO CLEAN & DISINFECT

The size of your premises, your business activity, the frequency of use of your premises etc will determine the most effective sprayer system and the level of cleaning and disinfecting required. However, the following how-to cleaning steps remain the same:

1) CLEANING

- Use a sprayer to spray ALL high touch areas e.g. handles, chairs, tables, treatment couches, weights with soap and water or a detergent solution
- Wipe these with a clean cloth or sponge. If you can leave this on for some minutes before wiping, even better.
- Handheld compression sprayers will be perfectly adequate for small-medium premises and the benefit of these is they leave a hand free for wiping. For larger premises, use a backpack sprayer.

2) DISINFECTING

- Use a sprayer to spray the high-touch areas with a disinfecting solution (see Important Information box)
- Depending on the nature of your business, spray other surfaces (e.g. walls, doors etc)
- Allow spray to dry. Do not wipe off.
- If you cannot wait for the product to dry, official advice is that you allow the product 10 minutes to work before drying manually.
- For harder to reach areas e.g. a weight rack in a gym, shelves etc a high pressure sprayer will produce a mist that can penetrate the area.
- For thorough disinfection of heavily used, very large or medical facilities, use a disinfectant wet fogger.

What determines the best spray?

Droplet size plays an important role in effective spraying.

In order to treat the virus in the **air**, the disinfectant must remain airborne long enough to come into contact with the virus and to be carried to every nook and cranny. Droplets therefore need to be small. However, if droplets are too fine they linger for too long in the air. Premises can't be entered for many hours as breathing in the chemicals can be hazardous to health. A long wait may be fine in some businesses but not in a busy salon for example.

In order to treat **surfaces**, spray needs to form a uniform and micro fine coating. So, droplets need to be heavier so they fall and stick to the surface. However, if they are too big and heavy they just splat which means patchy coverage and a very wet surface which requires time and manpower to wipe and dry.

The **ideal scenario** is to have **droplets that are airborne long enough to be carried everywhere but which also then drop and adhere to surfaces and dry quickly**. This combination means air can be breathed in safely and equipment is dry and ready to use.

Electric wet foggers or nebulisers are the ideal product to achieve this as they produce a mist of just the right sized particles and can reach every area of a room and treat surfaces too without causing wetness but they are expensive and probably not necessary (although as we learn more about the virus, this may not prove to be the case) for many businesses.

High-pressure sprayers are the next best option as they provide a mist which can be sprayed into hard to reach areas e.g. a weights rack in a gym, between bottles on a shelf etc. The spray does cause some wetness but should dry quickly. The fact that they have to be pumped by hand, however, means the spray is less easy to direct.

Compression sprayers are easy to use and provide a continuous, non-patchy flow of spray with droplets that adhere well to surfaces. The spray will cause wetting however and surfaces will need to be wiped dry or left longer to dry.

Important Information

- 1) **Wear adequate PPE** - Consult disinfectant product manufacturer for details of PPE required. Note that for wet fogging, a good quality activated carbon mask, eye protection and protective clothing should be worn.
- 2) **Disinfectants**. All our equipment can be used with commercial chemicals (ready to use) with permitted concentrations as follows: Sodium Hypochlorite 0.5%, Hydrogen Peroxide 0.5%, quaternary ammonium compounds 0.05% and disinfectants for general use with viricidal action. Backpack, handheld and compression sprayers can also be used with alcohol-based products. **DO NOT** use alcohol-based products with foggers and nebulisers as this presents an explosion risk.
- 3) **Ensure area is ventilated** - Allow at least 30 minutes before entry by non-PPE wearing employees
- 4) **Do NOT spray electronic items** - Consider using wipeable covers.