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## **Coptic Medical Association of North America “CMANA” recommendations regarding protocols of use of Virocid® for human subject in the COVID-19 pandemic\***

*\*Disclaimer: “CMANA sought opinions of Chemists and pharmacists within her members. From the published data and the lack of human subjects’ experiments, we are issuing these recommendations, should there be any human pilot study or otherwise published in a respectable journal and we are unaware of, we remain corrected”.*

It has come to our attention, through media and personal reports, the proposed initiatives of use of aerosolized disinfectant machines to limit the spread of COVID-19 in church and other places of gatherings. While we applaud all efforts to contain the spread of the virus among the population, we have **significant concerns** on the safety and health of human subjects exposed to the disinfecting unit.

Based on the information available in the company website and their published materials, the disinfecting unit aerosolizes a popularly used disinfectant Virocid® manufactured by Cid Lines. Our concerns about this proposal can be summarized in the following points:

1. The published instructions for use and safety by the company that manufactures Virocid® explicitly prohibits the use on human subjects. The technical information for the chemical does not include any allowances for dilution of the chemical to be used on humans  
([https://www.cidlines.com/sites/default/files/sds\\_downloads/Virocid%20%281%29.pdf](https://www.cidlines.com/sites/default/files/sds_downloads/Virocid%20%281%29.pdf)).
2. There are no published safety data **in HUMANS** on such mode of use of Virocid®, even at diluted concentrations, on the risk of carcinogenicity, teratogenicity (possible congenital birth defects), and fertility. Moreover, there is a considerable immediate risk for harm for many people with lung, skin, and eye problems. Such kind of protocols need to extensively studied for safety before public implementation.



3. Based on chemical studies of the components of Virocid®, the published data suggests the following:
  - Benzyltrimethyltetradecylammonium chloride: is a pesticide and corrosive agent; it should be handled with appropriate Personal Protective equipment  
([https://pubchem.ncbi.nlm.nih.gov/compound/8755#section=Personal-Protective-Equipment-\(PPE\)](https://pubchem.ncbi.nlm.nih.gov/compound/8755#section=Personal-Protective-Equipment-(PPE)))
  - Didecyltrimethylammonium chloride a pesticide and corrosive agent; the primary dermal effects that have been reported are rash, burning sensation, numbness, and itching  
(<https://pubchem.ncbi.nlm.nih.gov/compound/23558#section=Safety-and-Hazards>). In mice this disinfectant was found to cause infertility and birth defects when combined with Alkyl (60% C14, 25% C12, 15% C16) dimethyl benzyl ammonium chloride (ADBAC).
  - Glutaraldehyde: Glutaraldehyde vapor or mist can be a strong irritant or corrosive to the eyes, nose throat, and lungs. It needs to be handled with tightly fitting safety goggles and gloves  
(<https://pubchem.ncbi.nlm.nih.gov/compound/3485#section=Safety-and-Hazards>). The Federal Occupational Safety and Health Administration (OSHA) does not have a Permissible Exposure Limit for glutaraldehyde.
  - Propan-2-ol is Isopropyl alcohol is flammable and irritant  
(<https://pubchem.ncbi.nlm.nih.gov/compound/3776#section=Safety-and-Hazards>)
4. As is customary for any scientific endeavor, there is a need for a process of evaluation and peer review for the new scientific proposal. In the case of this novel disinfecting units, there needs to be a critical evaluation of the technology by independent healthcare and pharmacology experts. It is insufficient to have preliminary safety reports by the manufacturing entity.
5. CMANA has no personal agenda nor we are in the business of manufacturing competing products; our main target is the welfare of our fellow Egyptians regardless of their religion. We believe the company ought to have published on the safety of their product in Men of all ages, Women especially those in Child bearing ages, pregnant ladies and Children **BEFORE** publicizing its safety.
6. An additional major concern for such units is that it could give a false sense of security to the public, prompting them to become more relaxed in enforcing social distancing and using masks. The reality is that the COVID-19 virus is transmitted by droplets that can travel up to 6 feet. The disinfecting unit limits the impact of touch on the spread of the virus, however it does nothing to prevent the aerosolization of virus. Simply put, a person in a gathering who is an asymptomatic carrier may go through the unit, and while not using a face mask or keeping social distance, can easily infect all those around him

Based on these findings, we strongly urge you to reconsider using these units on the churches or Mosques congregations. While the circumstances of this pandemic have expedited the approval of unconventional therapies (such as medications and plasma transfusion), all these therapies have been previously used in human subjects for different indications. The expedited use of a technology that has never been used in humans is scientifically and ethically unacceptable. We have included below several recommendations from US organizations regarding the use of disinfectants for surfaces and spaces, not for humans.

Submitted respectfully;

Coptic Medical Association of North America.

**References:**

1. Interim Guidance for Administrators and Leaders of Community- and Faith-Based Organizations to Plan, Prepare, and Respond to Coronavirus Disease 2019 (COVID-19) <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/guidance-community-faith-organizations.html>
2. Guidelines for Opening Up America Again <https://www.whitehouse.gov/openingamerica/>
3. Reopening Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes <https://www.cdc.gov/coronavirus/2019-ncov/community/reopen-guidance.html>
4. Disinfectants for Use Against SARS-CoV-2 <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>.
5. Cleaning and Disinfecting Your Facility <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>
6. Cleaning and Disinfection for Community Facilities <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html>.

Using disinfectants to control the COVID-19 virus  
<http://npic.orst.edu/ingred/ptype/amicrob/covid19.html>