Antimicrobial Products

Background
The use of antimicrobial products in the home has grown rapidly over the past two decades. While the majority of these products are in cosmetic or skin antiseptics, such as antibacterial soaps and body washes, antimicrobial agents are also used as preservatives in natural health products, such as pest-control products, and impregnated in numerous domestic products (e.g., clothing, toys, kitchen utensils, towels and bedding). Some antimicrobial agents, such as triclosan, may build up in the environment and accumulate in household dust, increasing exposure for those in the home, especially small children, and in water, impacting ecosystems and wildlife. Toxic by-products of triclosan have potential to cause hormone disruption and cancer.

The use of antibacterial products in the home may do little to prevent household illness as most common household illnesses are caused by viruses. Long-term regular use of antimicrobial products may also lead to the development of antimicrobial resistance. In light of this information, both Public Health Agency of Canada and the Food and Drug Administration in the United States are requiring manufacturers to prove the safety and efficacy of antibacterial products. To date there is no evidence to indicate that antimicrobial products are safer or more effective than plain soap and water.

Note regarding hand hygiene products: Antibacterial soap should not be confused with alcohol-based hand rubs (ABHRs) which contain alcohol. ABHRs are effective in killing most germs, including bacteria and viruses, on the surfaces of hands. Alcohol-based hand rubs do not contain chemicals that are harmful to the environment and do not promote the development of resistance. These products can be used as an effective alternative to hand washing with plain soap and water as long as hands are not visibly soiled.

Even within the healthcare setting, plain soap is used for hand cleaning. Antibacterial soap may be considered for use in critical care areas such as intensive care and burn units where patients are highly susceptible to infection. Antibacterial soap is generally not required and not recommended in other care areas.

In response to international focus on transmission of organisms from high touch surfaces during the SARS-CoV-2 pandemic, surfaces and coatings capable of minimizing the presence of active viral pathogens are being explored in settings beyond health care, including public transport, schools, and
businesses. However, their use does not preclude thorough cleaning and disinfection, and their application in household settings has yet to be warranted.

**Position Statement**
In community/home settings, the use of antimicrobial products, including textiles and animal and personal care products such as soaps, has not been found to be of additional benefit and may have adverse effects related to their chemical ingredients. Therefore, their use in community settings is not recommended. Emphasis should continue to be placed on effective hand washing with plain soap, good personal hygiene, safe food preparation, and basic home cleanliness.

**Glossary/Definitions**

**Antibacterial**: Inhibits the growth of or kills bacteria

**Antimicrobial**: Inhibits the growth of or kills microbes including bacteria, viruses, fungi, and parasites

**Community**: A population of humans in a geographic area. For the purposes of this document, people outside of hospital or congregate living settings.

**Community-based health care**: Healthcare assistance for people at home/in the community.

**Home**: One’s place of residence.

**Stakeholders**
Infection Prevention and Control Professionals, healthcare workers, and their clients.

**Participants in Development of Position Statement**
This position statement was developed by Standards and Guidelines Committee and reviewed in collaboration with the Environmental Health Interest Group.

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**References**


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