



ESCHERICHIA COLI

How Long Can Pathogens Persist On Inanimate Surfaces?

The most common disease-causing pathogens can persist on high touch surfaces and objects from hours to months, under the right environmental conditions, creating a continuing source of transmission if no regular preventive surface disinfection is undertaken. Forty of the 56 organisms listed below (denoted by an asterisk*) are killed by quat-based formulations. **Read labels carefully to see which products will kill each of these persistent pathogens.**

BACTERIA	
<i>Acinetobacter</i> spp.*	3 days to 5 months
<i>Campylobacter jejuni</i> *	Up to 6 days
<i>Clostridium difficile</i> (spores)	5 months
<i>Chlamydia pneumoniae</i> , <i>C. trachomatis</i>	≤ 30 hours
<i>Chlamydia psittaci</i> *	15 days
<i>Corynebacterium diphtheriae</i>	7 days – 6 months
<i>Corynebacterium pseudotuberculosis</i>	1–8 days
<i>Escherichia coli</i> *	1.5 hours – 16 months
<i>Enterococcus</i> spp. including VRE and VSE*	5 days – 4 months
<i>Haemophilus influenzae</i>	12 days
<i>Helicobacter pylori</i>	≤90 minutes
<i>Klebsiella</i> spp.*	2 hours to >30 months
<i>Listeria</i> spp.*	1 day – months
<i>Mycobacterium bovis</i> *	> 2 months
<i>Mycobacterium tuberculosis</i>	1 day – 4 months
<i>Neisseria gonorrhoeae</i>	1 – 3 days
<i>Proteus vulgaris</i> *	1 – 2 days
<i>Pseudomonas aeruginosa</i> *	6 hours – 16 months; on dry floor-- 5 weeks
<i>Salmonella typhi</i> *	6 hours – 4 weeks
<i>Salmonella typhimurium</i> *	10 days – 4.2 years
<i>Salmonella</i> spp.*	1 day
<i>Serratia marcescens</i> *	3 days – 2 months; on dry floor-- 5 weeks
<i>Shigella</i> spp.*	2 days – 5 months
<i>Staphylococcus aureus</i> , including MRSA *	7 days – 7 months
<i>Streptococcus pneumoniae</i> *	1 – 20 days
<i>Streptococcus pyogenes</i> *	3 days – 6.5 months
<i>Vibrio cholerae</i> *	1 – 7 days

FUNGI

Candida albicans*	1 – 120 days
Candida parapsilosis	14 days
Torulopsis glabrata	102 – 150 days

VIRUSES

Adenovirus*	7 days – 3 months
Astrovirus	7 – 90 days
Coxsackie virus	> 2 weeks
Cytomegalovirus*	8 hours
Ebola virus*	3-6 days* ††
Echovirus	7 days
HAV*	2 hours – 60 days
HBV*	> 1 week
HIV*	> 7 days
Herpes simplex virus, type 1 and 2*	4.5 hours – 8 weeks
Influenza virus*	1 – 2 days
Marburg virus* †††	4 – 5 days
Monkeypox virus* †††	15 days
Norovirus*†	8 hours – 7 days
Papillomavirus 16	> 7 days
Papovavirus	8 days
Paramyxovirus (Mumps)*	Hours to days
Poliovirus type 1*	4 hours – < 8 days
Poliovirus type 2*	1 day – 8 weeks
Pseudorabies virus	≥7 days
Rabies*	up to 6 days
Respiratory syncytial virus*	up to 6 hours
Rhinovirus*	2 hours – 7 days
Rotavirus*	6 – 60 days
SARS-associated coronavirus 2 (COVID-19)*	3 hours – 5 days
Vacciniavirus *	3 weeks – > 20 weeks

Sources:

Kramer, Axel; Schwebke, Ingeborg; Kampf, Gunter. (2006) How long do nosocomial pathogens persist on inanimate surfaces? A systematic review. *BMC Infectious Diseases* 6, 130 (2006)

American College for Emergency Physicians COVID-19 *Field Guide*

Fischer R, et al. (2015) Ebola Virus Stability on Surfaces and in Fluids in Simulated Outbreak Environments. *Emerg Infect Dis.* 2015 Jul;21(7):1243-6.

Belanov E.F. et al. (1996) Survival of Marburg virus infectivity on contaminated surfaces and in aerosols. *Vopr Virusol.* 1996 Jan-Feb;41(1):32-4.

† EPA [G List](#) of products registered as effective against Norovirus

†† EPA [L List](#) of products registered as effective against Ebola Virus

††† EPA [Q list](#) of products for emerging viral pathogens like Marburg and Ebola viruses



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