

AIR - SURFACE CONTAMINANTS

Lifespan outside the human body – Seconds to years

Virus and bacteria Lifespan outside the body

How long do bacteria and viruses live outside the body

HEPATITIS VIRUS LIFE SPAN OUTSIDE THE BODY

Hepatitis A : months

Hepatitis B: one week

Hepatitis C: 16 hrs to 4 days Depending on the presence of fluids or not.

Sources:

Centers for Disease Control and Prevention, December 8, 2006. Viral Hepatitis. Singer, MH. Hepatitis A. In: M Feldman, LS Friedman, LJ Brandt (eds), *Gastrointestinal and Liver Disease*, 8e. Philadelphia, Elsevier, 2006. 1639.

HIV VIRUS LIFE SPAN OUTSIDE THE BODY

HIV: seconds to several weeks depending on fluids or not.

References

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6. Slade JS et al. *The survival of human immunodeficiency virus in water, sewage and sea water*. Water Science and Technology 21(3): 55-59, 1989
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8. Nyberg M et al. *Isolation of human immunodeficiency virus (HIV) at autopsy one to six days post-mortem*. Am J Clin Pathol 94(4): 422-425, 1990
9. Thompson SC et al. *Blood-borne viruses and their survival in the environment: is public concern about community needstick exposures justified?* Aust N Z J Public Health. 27(6):602-7, 2003

TUBERCULOSIS BACTERIA LIFE SPAN OUTSIDE THE BODY

SURVIVAL OUTSIDE HOST: *M. tuberculosis* can survive for months on dry inanimate surfaces. *M. bovis* can survive on dry surfaces at 4°C. *M. tuberculosis* can survive in cockroach feces for 8 weeks, sputum on carpet (19 days) and wood (over 88 days), moist and dry soil (4 weeks), and in the environment for more than 74 days if protected from light (possibly longer if in feces).

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2. 29 SCIENTIFIC PUBLICATIONS CONFIRMING THE STATEMENT

Hepatitis kills people or decreases lifespan

- 16 Hours to months (Depending on presence of fluids)

- Sources:

- Centers for Disease Control and Prevention. December 8, 2006. Viral Hepatitis.

- Sjogren, MH. Hepatitis A. In: M Feldman, LS Friedman, LJ Brandt (eds), *Gastrointestinal and Liver Disease*, 8e. Philadelphia, Elsevier, 2006. 1639.

HIV kills patients or decreases lifespan

- Seconds to several weeks (fluids or dry)

Source: 9 Publications

- Thompson SC et al. *Blood-borne viruses and their survival in the environment: is public concern about community needle stick exposures justified?* Aust N Z J Public Health. 27(6):602-7, 2003

- 9 Additional publications

TBC Tuberculosis kills patients –decreases lifespan

- Months on dry surfaces

Sources: 29 Publications

Smallpox – Can survive many years

AIR - SURFACE CONTAMINANTS – KILL PATIENTS

Evidence & Research Based Statement

3. Krauss, H., Schiefer, H. G., Weber, A., Slenczka, W., Appel, M., von Graevenitz, A., Enders, B., Zahner, H., & Isenberg, H. D. (2003). Bacterial Zoonoses. In H. Krauss, H. G. Schiefer, A. Weber, W. Slenczka, M. Appel, A. von Graevenitz, B. Enders, H. Zahner & H. D. Isenberg (Eds.), *Zoonoses: Infectious Diseases Transmissible from Animals to Humans* (Third ed., pp. 216-217). Washington, D.C.: ASM Press.
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the smallpox virus is extremely hardy and is thought to live many years at room temperature.

Posted by Eileen Watkins on Thu, Jan, 09, 2014 @ 17:01 PM

AIR - SURFACE CONTAMINANTS – KILL PEOPLE

BACTERIA THAT KILLS PEOPLE
CAN BE ON ANY SURFACE IN THE OFFICE

PNEUMONIA & STREP THROAT BACTERIA LIFE SPAN OUTSIDE THE BODY

Researchers from the University at Buffalo in New York say two bacteria that cause many common infections in children and the elderly, such as strep throat and ear infections, can live outside the human body for long periods of time on various objects, including books, cribs and toys.

The investigators found that *Streptococcus pneumoniae* and *Streptococcus pyogenes* linger on many surfaces significantly longer than previously thought, opposing previous studies that suggest the bacteria quickly die once they have left the human body.

The researchers say their findings suggest that better strategies are needed to prevent infections, particularly in hospitals, schools and daycare centers.

S. pyogenes is a common cause of [strep throat](#) and skin conditions in school children, but the bacteria can also cause severe infections in adults.

[S. pneumoniae is a leading cause of morbidity and mortality from respiratory tract infections in children and the elderly, and it is also a leading cause of ear infections.](#)

Previous research from the team showed that certain bacteria develop biofilms when they colonize human tissues: [A biofilm is a group of microorganisms that bind together on a surface.](#)

[The researchers found that this bacteria is stronger than other bacteria that do not form biofilms, leading them to believe that the bacteria may linger on surfaces.](#)

To test if this was the case, the investigators analyzed a number of objects including books, stuffed toys and cribs in a child daycare center.

Potential for biofilm bacteria reservoirs

Many surfaces - including cribs - tested positive for *S. pyogenes*, while four out of five stuffed toys tested positive for *S. pneumoniae*.

S.Pneumoniae: Leading cause of mortality in elderly and children

[The researchers note that this testing was done after the surfaces had been cleaned, and prior to the center opening in the morning, meaning it had been a long time since the surfaces and objects had human contact.](#)

The investigators then tested 1-month-old biofilm of *S. pyogenes* and *S. pneumoniae* to see whether the bacteria was able to colonize. Results revealed that the biofilms could effectively colonize a mouse model.

[Other experiments found that the biofilms were able to survive for many hours on human hands, books, hard and soft toys and surfaces, even after cleaning.](#)

References:

Laura R. Marksa, Ryan M. Reddingera and Anders P. Hakansson, [Biofilm Formation Enhances Fomite Survival of Streptococcus pneumoniae and Streptococcus pyogenes](#), Published ahead of print 26 December 2013, doi: 10.1128/IAI.01310-13 Infect. Immun. March 2014 vol. 82 no. 3 1141-1146
[Toys, books, cribs can harbor bacteria for long periods, study finds](#), news release from the University at Buffalo, accessed 27 December 2013.

S.Pneumoniae: contaminant that can survive more than one month outside the body and could cause deadly infections in adults and children



OUR BCTS - STERITUBES

SINGLE PATIENT USE - USE IT OR LOOSE IT

DO NOT RE-USE WITH ANOTHER PATIENTS AFTER OPENING THE PACK
DO NOT TRANSPORT THE OPENED PACK TUBES TO ANOTHER ROOM
DISCARD OPENED TUBES PACK TO AVOID RISK OF CONTAMINATION