

# Copper, Pathogens and Disease

## Answers

1. In the US trial, which surface was identified as the most heavily contaminated and how many cfu/100 cm<sup>2</sup> were there?

Bed rails, 6,500 cfu/100 cm<sup>2</sup>.

2. 'Log reduction' is a mathematical term used to show the relative number of live microbes eliminated from a surface by disinfecting or cleaning. For example, 2 log reduction means the number of germs is 100 (10<sup>2</sup>) times smaller. In the graph showing reduced inoculum efficacy, estimate the log reduction for the coupon with an MRSA concentration of 10<sup>3</sup> cfu at 15 minutes?

3.1 log reduction (from 10<sup>3.1</sup> to 10<sup>0</sup>)

3. Schmidt's research group reported the risk of acquiring an infection increases with the level of bacteria. What is the level of bacteria proposed as benign?

250 cfu/100cm<sup>2</sup>

4. In your own school or college, make an assessment of the touch surfaces and come up with the top five high-risk list of those likely to be the most heavily contaminated with pathogens and most frequently touched.

Consider the following:

Sources of pathogens (e.g. our bodies, uncooked meat).

Methods of transferring these to surfaces (sneezing, touching, spilling).

Assessing the high traffic areas/most frequently touched surfaces (by observation).

[Return to Copper, Pathogens and Disease](#)