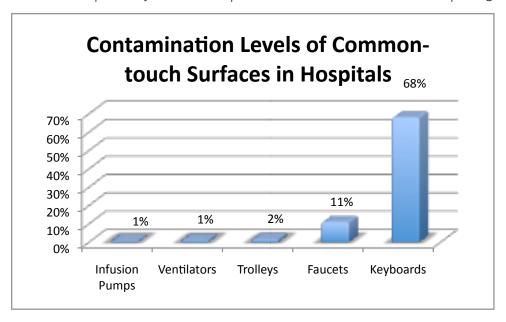


US Hospital Quick Facts:

- 100,000 people die each year from HAI;
- Another 1.7 million people contact HAI, extending their hospital stay by 17.6 days;
- HAI costs the healthcare system \$35 billion a year in the US alone;
- 9.4% of inpatient costs are HAI related;
- As many as 68% of computer keyboards in hospitals are contaminated with harmful pathogens.



Why are Keyboards such a problem?

Because keyboards are difficult to clean, they don't get cleaned. The extent of the problem is only now being understood, as more extensive clinical studies are being conducted.

Elevator Pitch

Cleankeys is a unique computer keyboard for use in healthcare and other environments where there is a high risk of contamination and subsequent risk of spreading infection. Unlike cleanable keyboard competitors, Cleankeys incorporates a smooth flat surface that is easy to clean. It can be effectively wiped clean in seconds, reducing the risk of spreading infection, increasing infection control protocol conformance and reducing staff time needed to effectively clean the keyboard.

Unique Value Proposition

Competitive products have adapted the mechanical keyboard using rubber and silicone to seal the unit, allowing immersion in water. For most healthcare settings this does not work well – there is simply not enough time and it is messy. In addition, cleaning in a sink does not disinfect the keyboard. There are still crevices that are difficult to clean, and the rubber breaks down from exposure to cleaners over time.

Ease of cleaning, effectiveness of the cleaning and contribution to protocol compliance form the core value proposition for Cleankeys.

¹ Refer to W21C clinical study results

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Competition

Most Cleankeys competitors evolved from industrial keyboard applications, with the medical market being a variation on the specialty keyboard theme. This makes the medical applications one of many.

All but a few are mechanical keyboards with a focus on waterproofing. All are sealed – by either rubber or silicone – for immersion in soapy water or heavy cleaning with disinfectant. This may be practical in an industrial application where keyboards are cleaned periodically, but not medical applications where frequent cleaning at the station is required.

Cleanable Keyboard Types

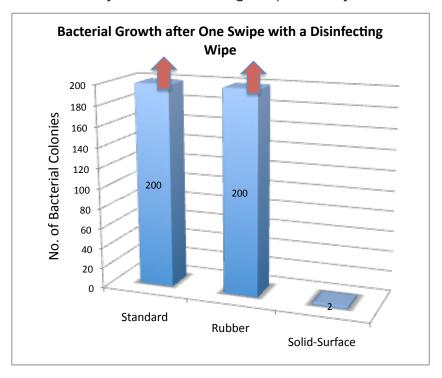
Over 90% of cleanable keyboards fall into one of four general categories: rubber, waterproof standard, sealed membrane, and solid surface.

Туре	Description
Rubber-based	Either the entire keyboard is made from molded rubber, or a rubber cover is provided over mechanical keys. Pros: cleanable, sealed Cons: hard to clean, attracts dirt, easily damaged
Waterproof Mechanical	A regular-looking keyboard with plastic mechanical keys, with a waterproof barrier between the keys and electronics. Some have anti-microbial additives to the plastic keys. Pros: easy to type on, relatively inexpensive Cons: must be cleaned in a sink, hard to clean between keys
Sealed Cover	Solutions range from simple plastic wrap over the keys of a normal keyboard to completely sealed membrane keyboards (with a vinyl or mylar cover). Pros: can be cleaned in place, flat and easy to clean Cons: strong tactile force required to actuate keys, can't touch type
Solid Touch Surface	Solid surface with touch-sensitive actuation. Pros: smooth surface makes cleaning easy, can be cleaned in place Cons: higher cost, learning curve for some typists

The key advantage of Cleankeys over each of these competitors is ease and effectiveness of cleaning. Medical assistants simply do not have the time to take a keyboard to the sink and wash it down with soap. They require cleaning/disinfecting in less than a minute or they simply will not do it, which increases the risk of spreading infection. Reliability and longevity are also a factor. The mechanically sealed keyboards simply do not last as long as Cleankeys electronic keyboard.

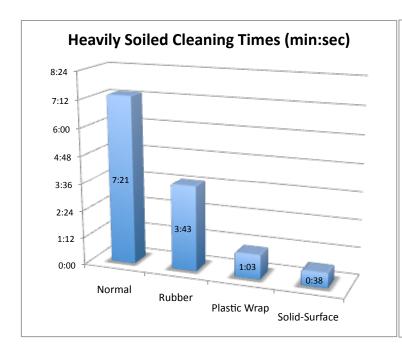
Cleaning Effectiveness

In a study conducted by at the University of Alberta, keyboards were cultured pre inoculation, post inoculation and post cleaning. After one wipe of a Caviwipe, Cleankeys was at least 100 times less infected than the silicon rubber keyboard and the regular plastic keyboard.



Cleanability

It takes less time to clean Cleankeys, thus increasing productivity. Cleankeys also requires fewer consumables to clean and disinfect due to its smooth surface, providing direct cost savings. Combined, these two economic benefits mean Cleankeys pays for itself in a matter of months.





cleankeys®

Summary of Major Cleankeys Benefits

Feature	Advantages	Benefits
Smooth, flat surface	Non-porous surface, No nooks or cracks that are hard to reach for cleaning, Easily disinfected.	Maximizes infection control
Shallow key wells on the top surface of the keyboard	Tactilely discernible yet shallow enough so-as not to create "cleaning shadows".	Allows for fast typing without compromising ease of cleaning
Pause button for cleaning	No need to power down for cleaning	Can be cleaned anytime
TouchTap™	Ability to rest fingers on keyboard without engaging keys	Enables high speed typing approaching that of a typist on a regular keyboard
Sensitivity setting	Adjustable for each user	Maximizes productivity
No mechanical parts	Long life expectancy	Low cost of ownership effective infection control
Numeric keypad	Convenience, expected feature	Good for charting