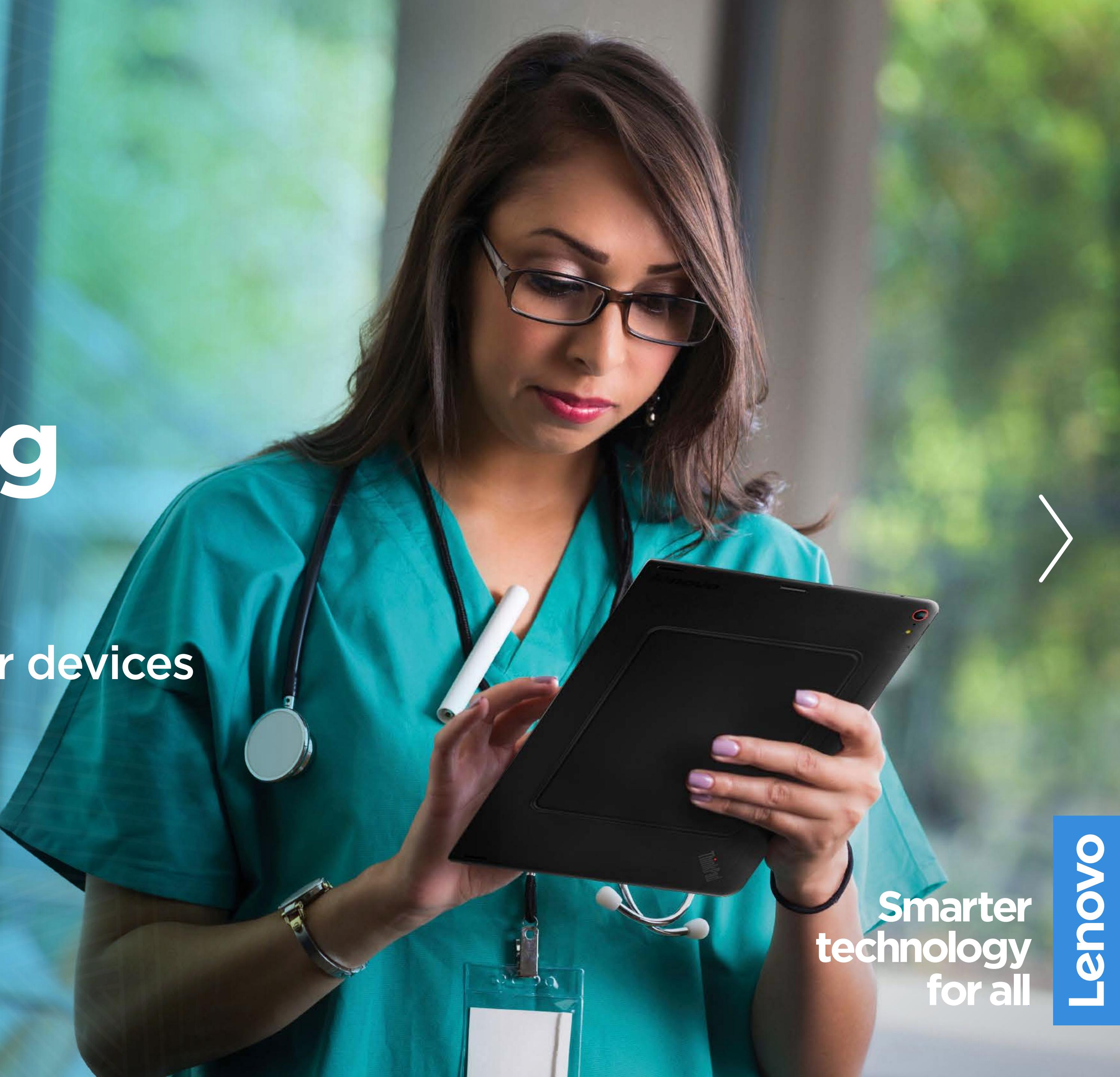
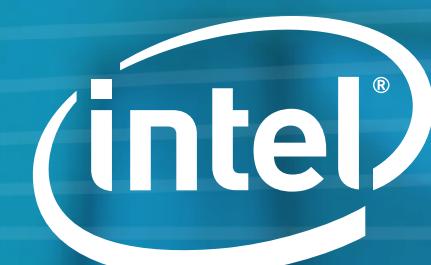


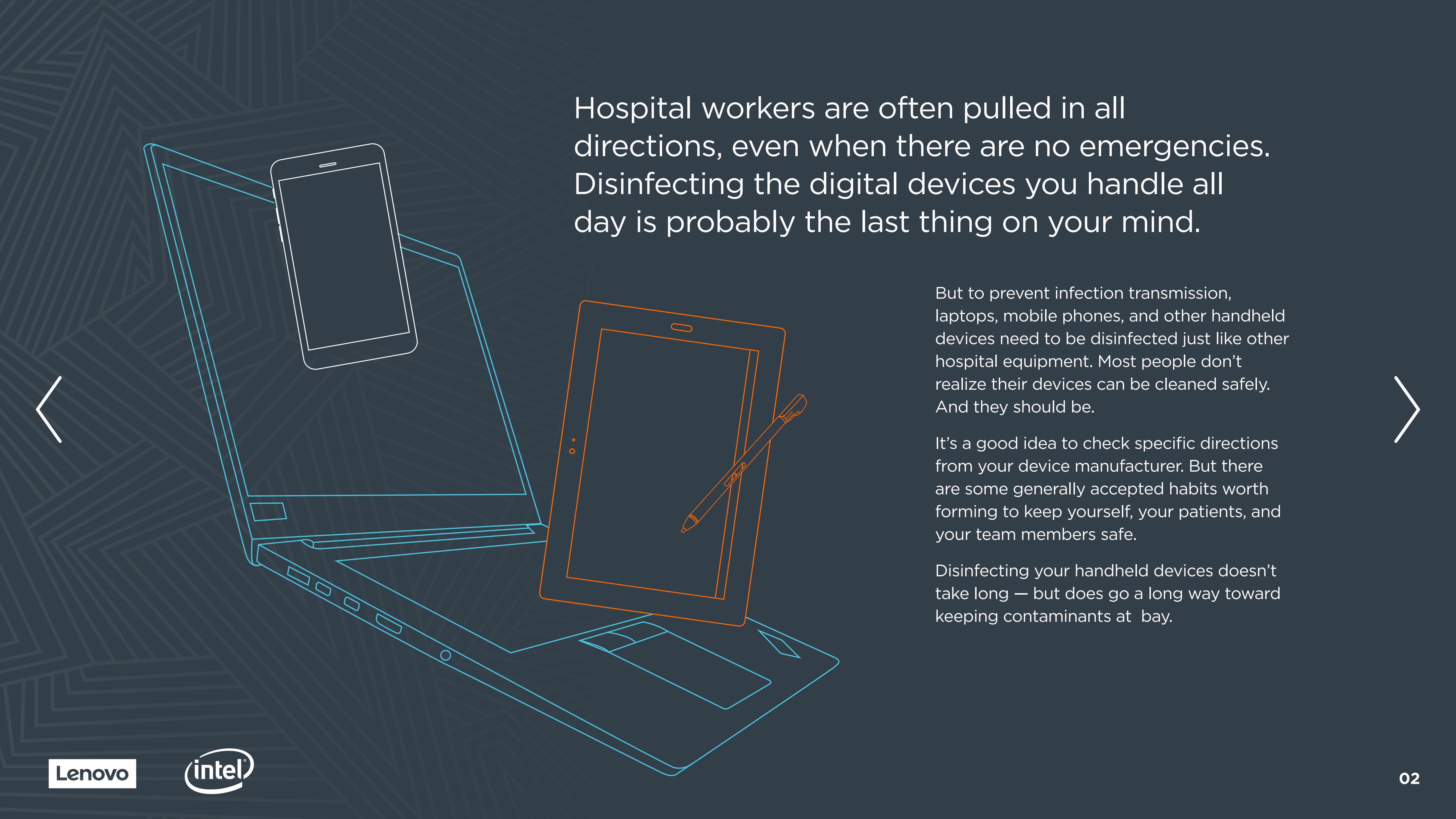
# When Cleaning Isn't Enough

The real dirt on disinfecting your devices



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Hospital workers are often pulled in all directions, even when there are no emergencies. Disinfecting the digital devices you handle all day is probably the last thing on your mind.

But to prevent infection transmission, laptops, mobile phones, and other handheld devices need to be disinfected just like other hospital equipment. Most people don't realize their devices can be cleaned safely. And they should be.

It's a good idea to check specific directions from your device manufacturer. But there are some generally accepted habits worth forming to keep yourself, your patients, and your team members safe.

Disinfecting your handheld devices doesn't take long — but does go a long way toward keeping contaminants at bay.

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# Why disinfect your devices?

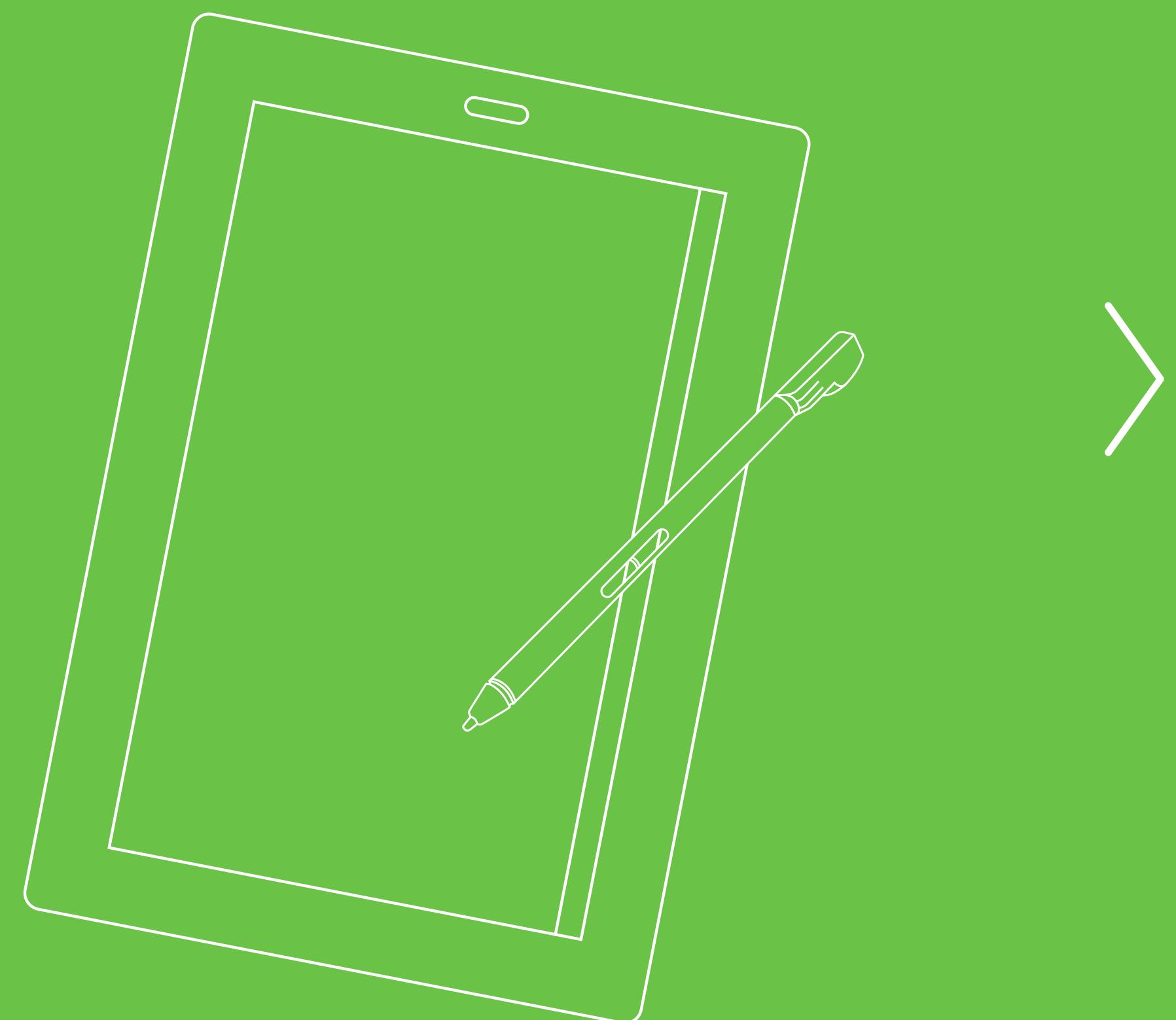
## The good, the bad, and the ugly

If you suspect your mobile devices harbor germs, you're not wrong! A growing body of literature shows the rate of bacterial contamination of healthcare workers' mobile devices ranges from 40% to nearly 100% — yet a whopping 90% of patient-facing care providers never clean their mobile phones.<sup>1</sup> Even worse, one study of a hospital showed pathogens on 80% of mobile phones and on 81% of clinicians' hands that handled those phones.<sup>2</sup>

But there's good news, too. It doesn't take much to reduce all this contamination. One study found a 36% to 100% reduction within five minutes of the simple use of an antibacterial wet wipe.<sup>3</sup> Another reported cutting bacterial contamination in half using 70% isopropyl alcohol and 15 seconds of friction.<sup>4</sup>

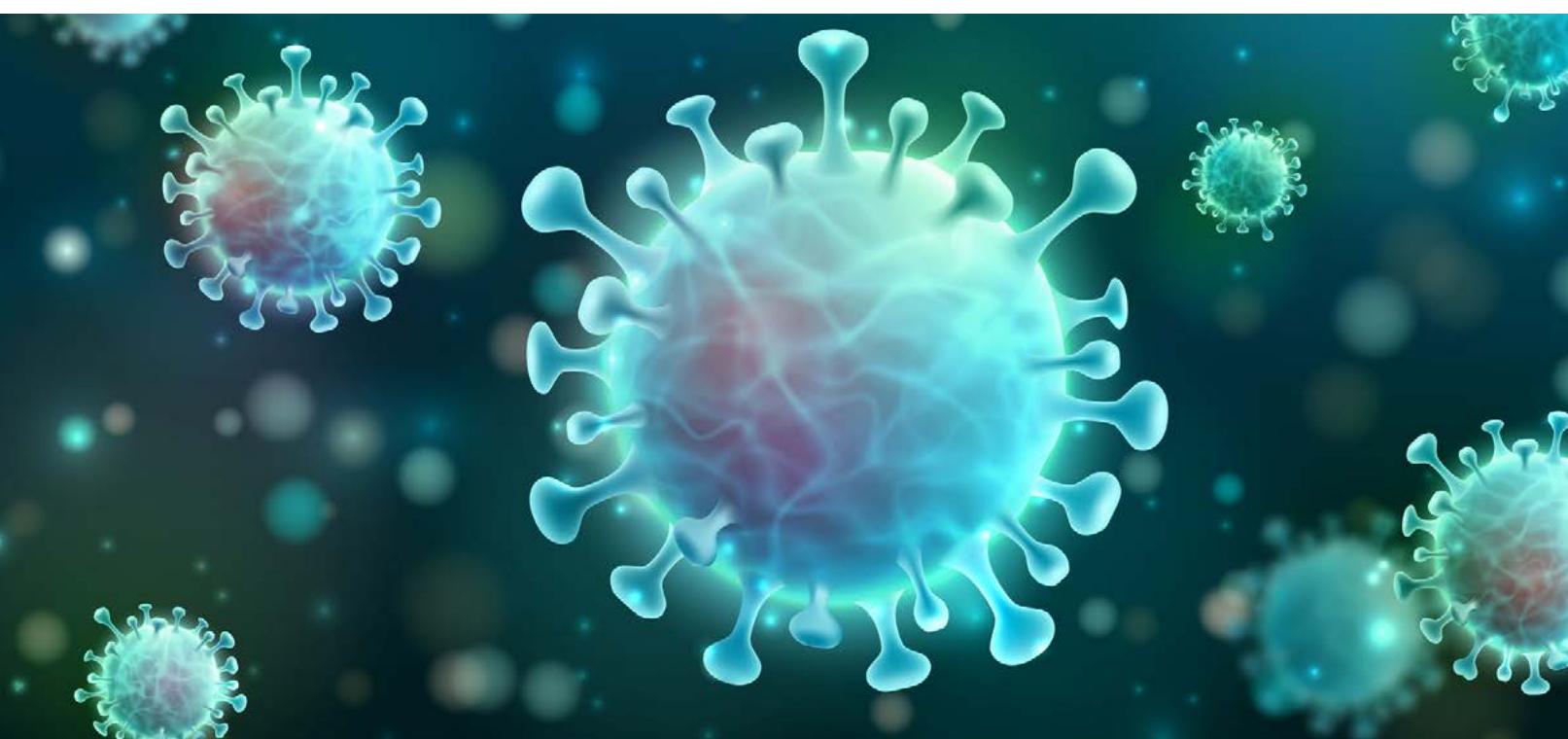
### DO YOUR PART TO REDUCE HAIs

Healthcare-associated infections (HAIs) affect one in 25 hospitalized patients in the US, resulting in the loss of tens of thousands of lives and costing the healthcare system billions of dollars. But infection prevention practices like these can reduce HAIs by as much as 70%.<sup>5</sup>



# Understanding Cleaning vs. Sanitizing vs. Disinfecting

Often used interchangeably, these are actually three distinct processes — each a different level of decontamination — with the primary goal of lowering the risk of infection. All of them reduce the chance of spreading germs that may cause illness and contribute to making surfaces safer. Cleaning is the most basic level, followed by sanitizing and disinfecting. While digital or electronic devices can't be sterilized, cleaning, sanitizing, and disinfecting are all good steps to take.



## COMING TO TERMS WITH SOME TERMS<sup>6</sup>



**Cleaning:** Removes germs, dust, dirt, and debris from surfaces, usually with soap and water. Doesn't necessarily kill all germs, but fewer germs means less risk of infection.

**Sanitizing:** Lowers the number of bacteria on surfaces to a safe level based on public health standards.

**Disinfecting:** Critical to limiting the spread of infection. Destroys or inactivates bacteria, viruses, and other disease-causing microorganisms — usually within a prescribed time. Pre-cleaning before disinfecting is recommended.

# Which devices should be disinfected?

**Hint: The ones you use all day**

In short, the ones you use — your everyday, go-to devices. These are likely a laptop, tablet, and mobile phone. You can clean and disinfect their cases, keyboards, and screens; also the mice. Don't forget the cords, earbuds, and headsets. And in healthcare, providers should think of their dictation/recording devices. These collect dirt and contaminants, too.

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## KICK VIRUSES OFF YOUR SMARTPHONE

Studies find that a virus may be able to survive for up to nine days on surfaces,<sup>7</sup> including the phone you touch continuously. From your hand to your face, contaminants get a free ride to your eyes, nose, and mouth. Clean and disinfect regularly!



# Breaking down the how-to

Cleaning and disinfecting can be accomplished in five easy steps — simple enough to do throughout the day. Before you know it, you'll be on auto-pilot. Take a look.

## BUT FIRST: HANDWASHING 101

You're going to be ridding your devices of contaminants, so you'll want to do it with uncontaminated hands! Few of us were taught the optimal way to really get our hands clean. As a healthcare worker, you probably were. If so, consider this a refresher — one you can share with the people in your life, at work and at home.

Lather up and do your best 20 seconds of "Happy Birthday" twice while scrubbing. Give some extra attention to the spots between your fingers (interlacing is good) and your fingertips (cupping hands together is good). And don't forget your thumbs — it's the number one spot people miss.





# Five steps to cleaning and disinfection

Use a non-abrasive, lint-free cloth for all steps.  
No paper towels!



## 1 WASH HANDS AND DISCONNECT

Scrub hands for 20 seconds. Unplug power cords and shut down device.



## 2 REMOVE DEBRIS

Gently invert device or use compressed air. Remove fingerprints and residue.



## 3 APPLY AGENT TO CLOTH

Apply cleaning agent to cloth (not onto device) and wring out. Or use a pre-moistened chlorine-free wipe.



## 4 DISINFECT

Wipe all surfaces and let agent set for the time required on label.



## 5 WIPE OFF AND DRY

Remove any liquid and residue. Allow to dry completely before closing or using device.





## CLEANING AND DISINFECTING AGENTS: Yes and Never

Choose your agents based on these guidelines. Whether you use pre-moistened wipes or a liquid solution, check the label for these active ingredients.

### **Best** Isopropyl alcohol

Recommended concentration 60%-70%

*Caution: More is not better! Never use straight rubbing alcohol that can strip the coatings that keep oil and water from damaging your device display and other ports.*

### **Good** Hydrogen peroxide

Recommended solution of 3% or less

### **Good** Pre-moistened wipes

Safe to use. Be sure to use wipes without chlorine or bleach.

**Never!** Chlorine or bleach

## PRO TIPS

- ✓ If using a liquid agent, always apply it to a lint-free cloth, never directly onto your device. No spraying!
- ✓ Wring out any excess liquid from packaged wipes or moistened cloth.
- ✓ You can use a lens cloth or lint-free cloth to wipe excess residue or cloudiness from the display.
- ✓ Leave the hand sanitizer for hands (don't use it as a disinfecting agent!).
- ✓ Test your agent on the back of your device first before applying to highly visible areas.





### WIPE DOWN WITHOUT SHUTTING DOWN

Devices like Lenovo's ThinkPad® T490 Healthcare Edition are equipped with the Lenovo Quick Clean application that lets you wipe down your device without powering it off.

Customize your timer or use the pre-sets to align with your disinfecting agent. Lenovo Quick Clean will disable the touchscreen display and lock the keyboard, mouse pad, and trackball automatically so you can quickly and safely wipe down the device and disinfect all surfaces.



# When should you disinfect?

Let contact be your guide

Ideally, you should disinfect handheld devices before and after every patient encounter that involves contact — also before and after your shift. A laptop purpose-built for medical use, like the Lenovo T490 Healthcare Edition, still needs to be disinfected regularly. And while they're not devices, it's a great idea to wipe down your ID badge, keys, and even jewelry before you go home.



LEARN MORE ABOUT  
THE LENOVO T490  
HEALTHCARE EDITION

[www.Lenovo.com/Health](http://www.Lenovo.com/Health)

## Pass it on!

Just as data protection and device maintenance should be a regular part of the hospital day, so should putting these simple steps into regular practice.

Universal precautions are already a part of your routine. Adding device disinfection to the mix provides greater protection for you, your patients, and your coworkers.

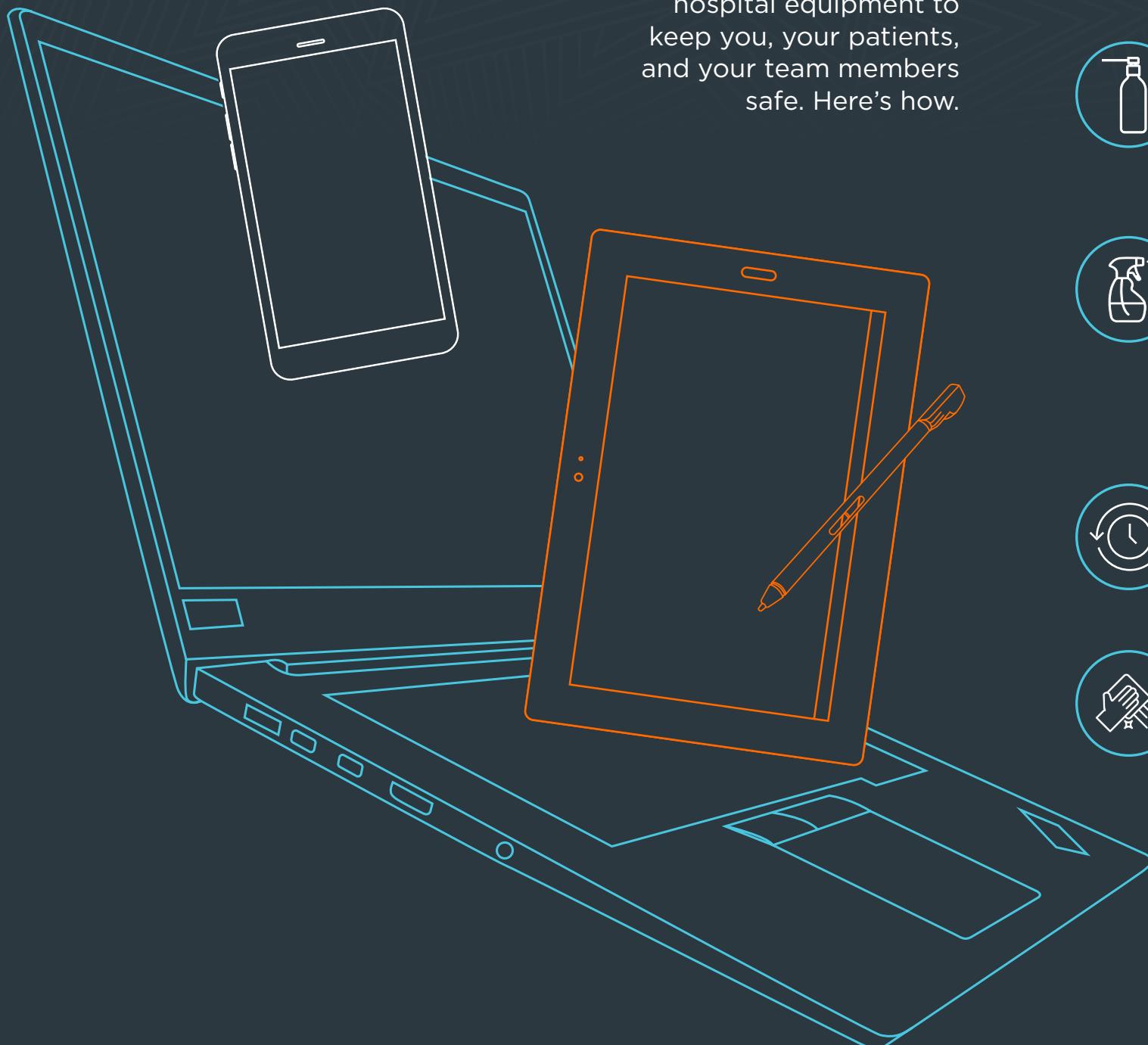
**On the next page, you'll find a poster you can share as a reminder. Print it out and post!**



# Disinfect your devices

## Five steps to disinfection

The digital devices you handle all day need to be disinfected just like other hospital equipment to keep you, your patients, and your team members safe. Here's how.



Use a non-abrasive, lint-free cloth for all steps. No paper towels!

### 1 WASH HANDS AND DISCONNECT

Scrub hands for 20 seconds. Unplug power cords and shut down device or use Quick Clean application.

### 2 REMOVE DEBRIS

Gently invert device or use compressed air. Remove fingerprints and residue.

### 3 APPLY AGENT TO CLOTH

Apply cleaning agent to cloth (not onto device) and wring out, or use a pre-moistened chlorine-free wipe.

### 4 DISINFECT

Wipe all surfaces and let agent set for the time required on label.

### 5 WIPE OFF AND DRY

Remove any liquid and residue. Allow to dry completely before closing or using device.

#### CLEANING

Removes germs, dust, dirt, and debris from surfaces to reduce the risk of infection.



#### DISINFECTION

Destroys or inactivates bacteria, viruses, and other disease-causing microorganisms to limit the spread of infection.



*Always clean before disinfecting!*

#### HOW OFTEN?

Ideally, you should disinfect mobile devices before and after every patient encounter that involves contact — also, before and after your shift.



#### DISINFECTING AGENTS

**BEST**  
isopropyl alcohol  
**NEVER**  
chlorine or bleach

## 50%-60%

of healthcare professionals use mobile handheld devices during patient care.<sup>1</sup>

Pathogens found on

**80%** of mobile phones and



**81%** of the hands using them<sup>2</sup>



**PREVENTION PRACTICES** can reduce healthcare-associated infections by as much as 70%.<sup>3</sup>

#### DON'T FORGET TO CLEAN ACCESSORIES!

External keyboards and mice, cords, earbuds, and headsets can all be disinfected using these steps. Make sure mouse trackballs are free from cleaner and cords are dry before stowing.



**9 DAYS** The amount of time a virus may be able to survive on surfaces<sup>4</sup>



#### LENOVO THINKPAD® T490 HEALTHCARE EDITION

Optimized for healthcare with advanced features for secure network authentication, easy disinfection, and privacy protection.

For more information, go to [www.Lenovo.com/Health](http://www.Lenovo.com/Health)

Sources:

- 1 <https://www.myamericanurse.com/mobile-devices-healthcare-associated-infections/>
- 2 <https://www.healthcareitnews.com/news/ensuring-computers-notebooks-and-mobile-devices-are-included-disinfection-mix>
- 3 <https://www.healthypeople.gov/2020/topics-objectives/topic/healthcare-associated-infections>
- 4 [https://www.journalofhospitalinfection.com/article/S0195-6701\(20\)30046-3/fulltext](https://www.journalofhospitalinfection.com/article/S0195-6701(20)30046-3/fulltext)



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## SOURCES

- 1 <https://orb.binghamton.edu/cgi/viewcontent.cgi?article=1001&context=alpenglowjournal>
- 2 <https://www.healthcareitnews.com/news/ensuring-computers-notebooks-and-mobile-devices-are-included-disinfection-mix>
- 3 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6210060/>
- 4 <https://www.myamericannurse.com/mobile-devices-healthcare-associated-infections/>
- 5 <https://www.healthypeople.gov/2020/topics-objectives/topic/healthcare-associated-infections>
- 6 <https://sonosupplies.com/blogs/learn/difference-between-cleaning-sanitizing-and-disinfection>
- 7 [https://www.journalofhospitalinfection.com/article/S0195-6701\(20\)30046-3/fulltext](https://www.journalofhospitalinfection.com/article/S0195-6701(20)30046-3/fulltext)

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