You're thinking about your patients.

We're thinking about you.

Reliably detect* surface contamination in **less than 10 minutes** with the **BD® HD Check System**

BD

*Tests for select hazardous drugs—cyclophosphamide, doxorubicin and methotrexate.
Surfaces with contamination at or above the limits of detection have 95% specificity and sensitivity.

Hazardous drug contamination is widespread and penetrating

Surface contamination with hazardous drugs (HDs) still occurs frequently, despite well-established safety guidelines and standards from NIOSH, USP and others[1,2]

Repeated exposure to HDs is reported to cause severe health complications

- **Detrimental effect on DNA**[3,4]
- **Damage to internal organs**[7]
- **Increased risk of cancer**[5,6]
- **Reproductive issues**[8,9]

Despite this, there are currently no available standards on the acceptable limits for HD contamination.

Unsafe surfaces in patient administration areas can increase the risk of HD exposure

Your facility may have already invested in safety measures such as engineering controls and personal protective equipment (PPE) to help protect your healthcare workers. But surface contamination can penetrate nonobvious areas of facilities through unsafe work practices. Contamination may be present and easily spread around your institution through high-frequency touch points. Standards and guidelines from the United States and Europe have identified several locations where routine wipe sampling for HD surface contamination might be beneficial.[10–13]

- A Infusion pumps and equipment[10,12]
- B Floors underneath infusion pumps[10,12]
- C Nursing workstations and countertops[10,12]
- D Restroom doorknobs and floors[10,12]
- E HD disposal bins[10,12]
- F Computer keyboards and mice[10]
- G Transport containers and trolleys[10]
- H Intravenous (IV) fluid bag storage shelves and cabinets[10]
- I Chairs[10]

NIOSH: National Institute for Occupational Safety and Health; **USP**: United States Pharmacopeia.

Routine monitoring can significantly reduce and even prevent contamination[1,14]

- A surface wipe sample study (N=1,269) demonstrated a **56% decrease in contamination levels when monitoring occurred at regular intervals**.[1] Approximately 75% of the monitoring group introduced cleaning protocol changes as a result of monitoring.[1]
- Another study that analyzed surface contamination levels of 5 HDs from 5,842 wipes at 338 hospital pharmacies over 6 years found "monitoring is beneficial in recognizing and correcting practices that lead to hazardous drug surface exposures, **preventing future contamination from occurring**."[14]
- USP <800> standards and many safe handling guidelines recommend routine monitoring to evaluate and help improve HD safe handling practices.[10–13]

Monitoring is beneficial in recognizing and correcting practices that lead to HD surface contamination[14]

To be effective at routine testing, facilities should be able to:

Easily test for HDs in multiple areas

Obtain results in real time

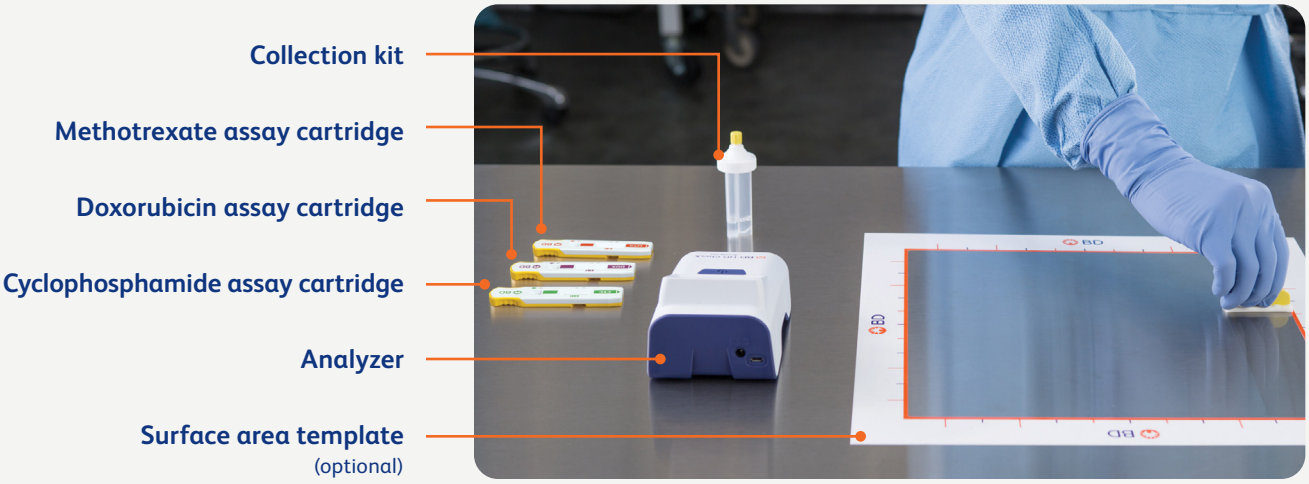
Take immediate corrective action

Presenting the BD® HD Check System

The first and only system that detects* HD surface contamination rapidly and reliably

- **For three commonly used HDs***
- **On multiple surfaces**
- **Giving easy-to-read binary results**
- **In less than 10 minutes**
- **Enabling quick re-testing to verify effectiveness of cleaning procedures**

With a convenient handheld design and components that are easy to use



Recommended by the 2020 National Consensus Conference on HD Surface Contamination[12]

*"Qualitative testing is recommended when rapid results are needed in order to determine the presence or absence of an HD. Currently, there is **only 1 commercially available qualitative system (BD HD Check, BD, Franklin Lakes, NJ), which offers 3 HDs that can be tested.**"*

– 2020 Safe to Touch Consensus Conference on Hazardous Drug Surface Contamination[12]

*Tests for select hazardous drugs—cyclophosphamide, doxorubicin and methotrexate.
Surfaces with contamination at or above the limits of detection have 95% specificity and sensitivity.

Detect HD contamination in eight easy steps

By using the BD® HD Check System†

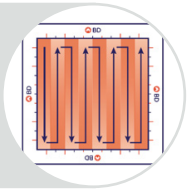
1

For each sample location, **gather a collection kit, assay cartridge(s)** and a template, if using one.

2

Establish test area and place a template, if using one, over the intended location. When ready, **open the collection kit packaging and then the swab packaging** to carefully remove the swab.

3



With slow and firm strokes, **swab entire test area** with the pre-moistened swab.

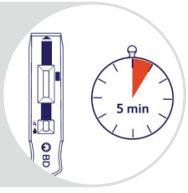
4

Insert the swab into the transfer vial, firmly close and fully invert for five cycles.

5

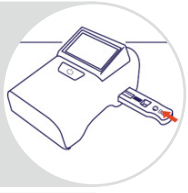
Leaving the swab inside, remove the dripper cap and **squeeze four drops into the sample well** on each assay cartridge.

6



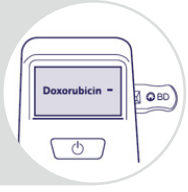
Using a timer, from the point of adding your sample, **allow five minutes for test development**.

7



Turn the analyzer on and **insert your first assay cartridge** when prompted.

8



The analyzer will process the assay cartridge and **display the tested drug's result**. Record and proceed as applicable.

†Surface testing only.
Not intended for human use.

Enabling you and your team to seamlessly integrate routine monitoring into your daily practice

Implement real-time surveillance of HDs in your facility

With our end-to-end BD® Hazardous Drug Surface Contamination Monitoring Program, centered around the BD® HD Check System

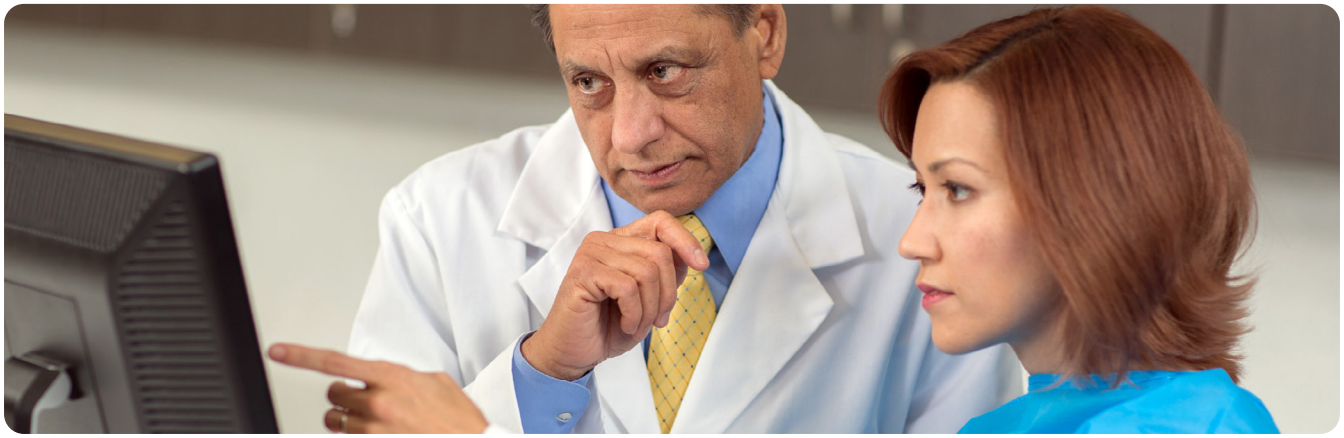
1. Assess
what, where and how often to test in your facility

2. Develop
an action plan for monitoring routinely

3. Test
for HD residues on multiple surfaces rapidly

4. Track
results over time, now and in the future

Our team is here to help you at each step to set up, customize and sustain HD surface monitoring in your facility.



Our program aligns with these latest guidelines on routine testing[13]

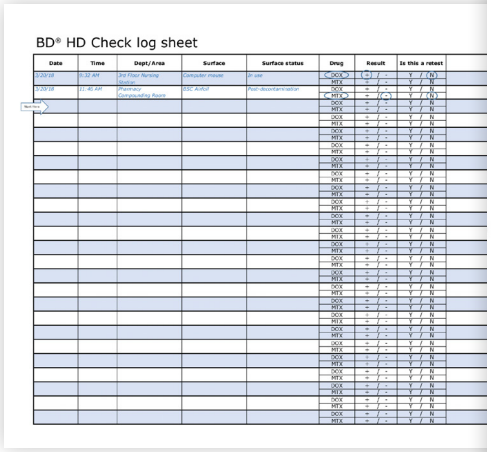
*"**To be efficient, any surface contamination monitoring plan should include an assessment** of the contamination risk present in the different sections of the HPD's compounding area. This is essential to determine **where to sample** and **establish a suitable monitoring frequency**. [...] Sampling frequencies are typically monthly, quarterly or half-yearly."*

– 2021 practice guidelines of the Spanish Society of Hospital Pharmacists (SEFH) on monitoring contamination of hazardous drug compounding surfaces at hospital pharmacy departments[13]

Track results over time

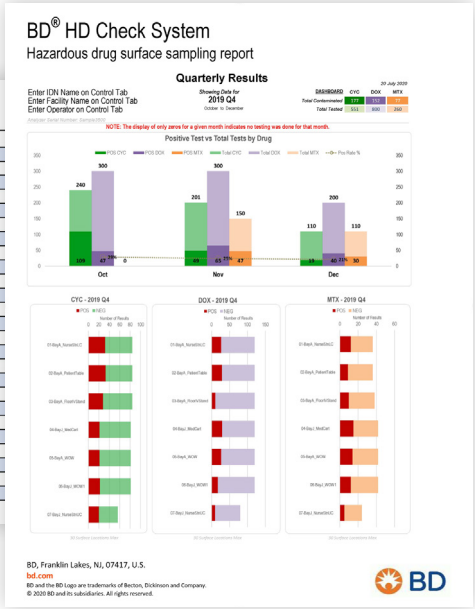
To record results quickly and validate the effectiveness of your facility's investments in safety measures

Continuous measurement and improvement is built into our program. We offer record-keeping tools, so you can track HD surface contamination* and results from multiple wipe events in your nursing area over time. Tracking also enables you to analyze the efficacy of your current safety standards, and change them as needed, now and in the future.


BD® HD Check log sheet

Date	Time	Dept/Area	Surface	Surface status	Drug	Result	Is this a retest
2/20/18	9:32 AM	3rd Floor Nursing Station	Computer mouse	In use	CYC ☐ DOX ☐ MTX ☐	+ / -	Y / N
2/20/18	11:45 AM	Pharmacy Compounding Room	ESC Airflot	Post-decontamination	CYC ☐ DOX ☐ MTX ☐	+ / -	Y / N

Manual logbook



Digital record keeping‡

Hospitals are already seeing results with the BD® HD Check System[15]

Performing surface monitoring at select locations in their **tertiary hospital**, Silvia Valero García and colleagues found that the BD® HD Check System offered multiple advantages, the primary being **speed and immediacy** in obtaining results. This allowed them to take **immediate corrective measures** when contamination was detected, and to **quickly assess the effectiveness** of containment and control measures.

– The first known published study to use a qualitative technique to detect HDs on surfaces[15]

*Applicable for Doxorubicin, Methotrexate, and Cyclophosphamide

‡ Currently available only in the U.S.

Contact your BD sales rep to order the BD® HD Check System

Part no.	Product	Case
515020	Analyzer	1
515033	Collection kit	20
515025	Doxorubicin assay cartridges	20
515029	Methotrexate assay cartridges	20
515031	Cyclophosphamide assay cartridges	20

To learn more about the BD® HD Check System and the BD® Hazardous Drug Surface Contamination Monitoring Program, visit **bd.com**

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