



Let's bring hazardous drug detection to the surface

by helping you assess your facility and develop a test plan with the BD[®] Hazardous Drug Surface Contamination Monitoring Program

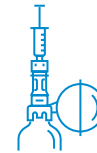


Your existing safety measures may not routinely monitor or detect HD contamination

You continue to invest in practices and products to help protect workers who handle hazardous drugs (HDs) at your facility. Measures such as engineering controls and PPE are designed to prevent and protect against the spread of HD exposure. But they are not designed to regularly monitor and detect contamination where the HD residue may already exist.



Personal protective equipment (PPE)



Engineering controls



Safe handling procedures

Any frequently touched surface may be the source, and host, of HD contamination

Over 100 studies published worldwide demonstrate workplace surface contamination with HDs.¹



Computer, keyboard and mouse

Storage trays

Surface in front of BSC

Door handles

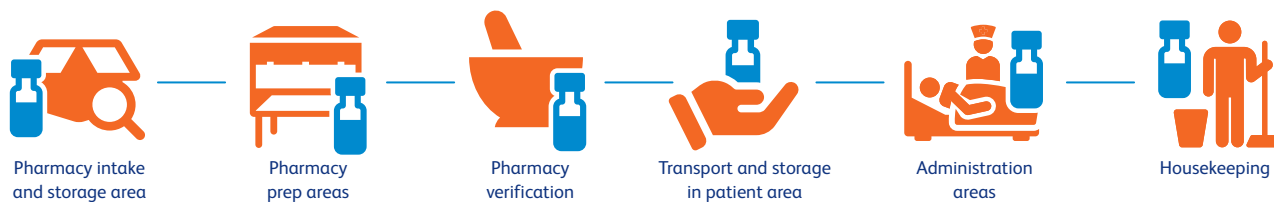
Drug vials and other equipment

Chairs

Countertops

Pharmacy floor

Exposure may occur at any point in the journey of an HD in your facility



A study of six hospitals found that **frequently contacted surfaces at every stage of the hospital medication system** had measurable levels of HD contamination.² If undetected, HD residue may remain on these surfaces—and potentially spread further. Anyone who handles HDs during transportation, preparation, administration or waste disposal may be at risk.²

Multiple guidelines recommend sampling surfaces routinely to help improve environmental quality³⁻⁵



Organizations, health agencies and conferences around the world, such as the United States Pharmacopeia (USP),³ Spanish Society of Hospital Pharmacists (SEFH)⁴ and the 2020 Safe to Touch Consensus Conference on Hazardous Drug Surface Contamination,⁵ recommend routine monitoring.

*“Environmental wipe sampling for hazardous drug surface residue **should be performed routinely** (e.g., initially as a benchmark and at least every six months, or more often as needed, to verify containment). [...] **Repeat the wipe sampling to validate** that the deactivation/decontamination and cleaning steps have been effective.”*

– USP General Chapter <800> Hazardous Drugs—Handling in Healthcare Settings³

*“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**. [...]”*

– 2021 SEFH practice guidelines⁴

It’s time to prioritize HD surface contamination monitoring throughout your facility

We have a unique end-to-end program

It's designed to help you set up, customize and sustain a HD surface contamination monitoring program for your facility



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

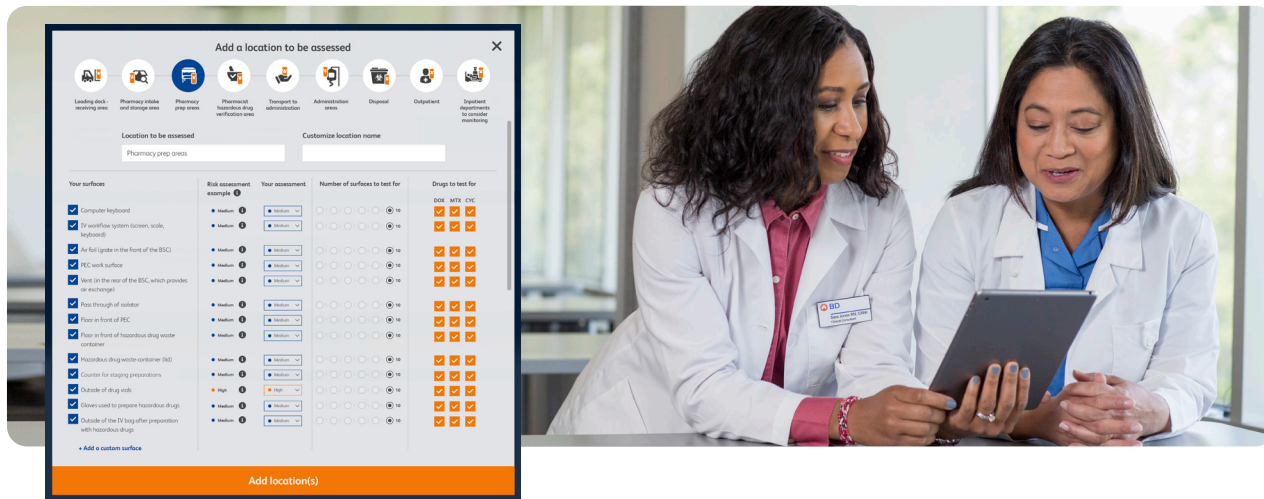
Our four-step program enables you to assess the potential for HD surface contamination in different areas of your healthcare facility. Your facility's HD detection concerns and fiscal realities are unique, so our sales representatives and clinical specialists will work closely with your team to understand your needs. Our tools, such as an assessment app, customizable procedure templates and the **BD® HD Check System**, are designed to help you implement a sustainable monitoring program.





1. Assess

First, we help you identify potential surfaces and risk areas of HD contamination in your facility



Using the BD® HD Surface Contamination Assessment App on an iPad, our BD sales rep will work with your assigned facility representative to:

- Determine testing **frequency** based on your risk classification
- Choose **locations** in the facility to assess (e.g., pharmacy prep areas, administration areas)
- Select **surfaces** at each location—choose from a list, and add your own custom surfaces
- Assign each surface **a contamination risk rating (High, Medium, Low)** based on key factors
- Select the **drugs** and number of surfaces to test

Risk assessment example

When considering assessing an area as High, Medium or Low one method would be to evaluate the **LIKELIHOOD** of contamination occurring, the **SEVERITY** if contamination were to occur and the **MITIGATION** strategies and tools that are in place to minimize the impact.

When evaluating the **LIKELIHOOD**, the following rating scale could be considered:

1. Low volume of hazardous drug handling; no or rare manipulation or administration (other than intact oral dosage forms)
2. Medium volume of hazardous drug handling with some manipulation or administration using safer practices
3. High volume of hazardous drug handling with frequent manipulation or administration with less safe practices (e.g., spiking bags)

When evaluating the **SEVERITY**, the following rating scale could be considered:

1. Restricted and very limited access (e.g., select trained employees)
2. Controlled access (e.g., employees only)
3. Open access (e.g., public and patient areas)

When evaluating **MITIGATION**, the following rating scale could be considered:

1. Engineering controls, administrative controls and Personal Protective Equipment (PPE) common
2. Administrative controls and PPE common
3. PPE only or no controls in place

We then offer you a detailed actionable report of the findings

Surface contamination assessment summary:

an overview of the HD journey locations and surfaces assessed, risk levels for each surface and their testing frequency

High-level budget impact summary: an analysis and estimated monthly budget of conducting the proposed test plan, and ability for revisions to meet both your monitoring and budget needs





2. Develop

Providing you a clear roadmap to help create a comprehensive test plan

The assessment data is provided in an intuitive format, enabling you to develop a HD surface contamination monitoring program that's right for your facility



Test locations and surfaces



Assigned risk levels



Drugs



Test frequency



Budget

And procedure templates to enable smooth implementation

Procedures are critical to implementing quality control—empowering you to maintain an effective routine monitoring program, and to update processes based on results

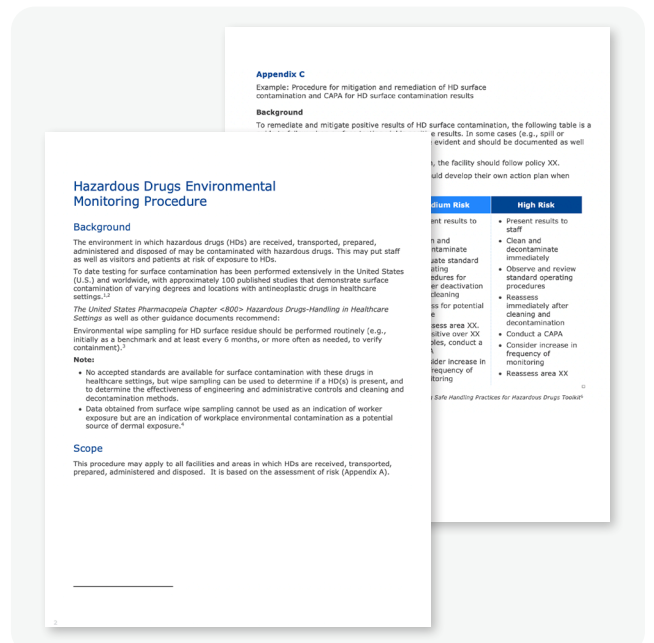
- Background, responsibility, results and reporting
- Scope, purpose and frequency of testing
- Risk assessment method
- Action plan for positive result (CAPA)

Customizable procedure template:

“fill in the blanks” and easily tailor testing as per your facility’s unique needs

Sample Standard Operating Procedure (SOP):

develop a customized action plan to respond to a positive result





Supported by the first and only rapid HD detection* system

3. Test

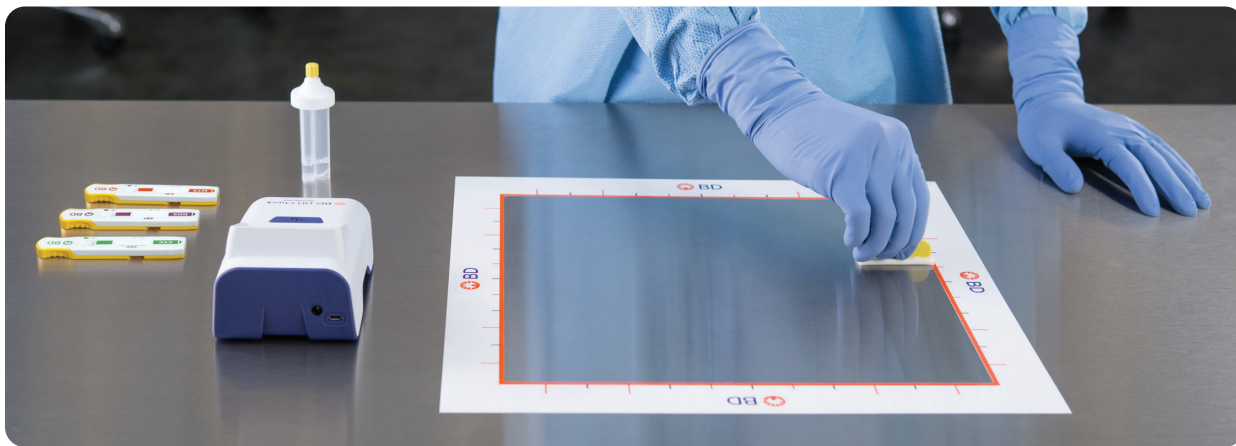
The BD[®] HD Check System

Reliably detects* surface contamination

- On multiple surfaces
- Gives easy-to-read binary results
- In less than 10 minutes



Enabling you and your team to detect surface contamination in real time, and integrate routine monitoring easily into your daily practice.



Recommended by the 2020 National Consensus Conference
on HD Surface Contamination⁵



“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 Contamination⁵

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

Let's get started

Let's set up and customize HD surface contamination monitoring at your facility



1. Assess your facility

- Locations
- Surfaces
- Drugs
- Risk ratings

2. Develop a test plan

- Background
- Test procedure
- Frequency
- Communicate, report and respond to results
- Action plan for a positive test result

To schedule a BD® HD Surface Contamination Assessment,
contact your **BD sales rep**

To learn more, visit go.bd.com/BD-HD-Check

References

- 1 Connor TH, Zock MD, Snow AH. Surface wipe sampling for antineoplastic (chemotherapy) and other hazardous drug residue in healthcare settings: methodology and recommendations. *J Occup Environ Hyg.* 2016;13(9):658–667. doi:10.1080/15459624.2016.1165912.
- 2 Hon CY, Teschke K, Chu W, Demers P, Venner S. Antineoplastic drug contamination of surfaces throughout the hospital medication system in Canadian hospitals. *J Occup Environ Hyg.* 2013;10(7):374–83. doi:10.1080/15459624.2013.789743.
- 3 United States Pharmacopel Convention. USP General Chapter <800> Hazardous Drugs—Handling in Healthcare Settings. <https://www.usp.org/compounding/general-chapter-hazardous-drugs-handling-healthcare>. Published February 1, 2016. Updated June 26, 2020. Accessed March 31, 2021.
- 4 Valero-García S, González-Haba E, Gorgas-Torner MQ, et al. Monitoring contamination of hazardous drug compounding surfaces at hospital pharmacy departments. A consensus Statement. Practice guidelines of the Spanish Society of Hospital Pharmacists (SEFH). *Farm Hosp.* 2021;45(2):96–107. doi:10.7399/fh.11655.
- 5 Gabay M, Johnson P, Fanikos J, et al. Report on 2020 Safe to Touch Consensus Conference on Hazardous Drug Surface Contamination. *Am J Health Syst Pharm.* 2021;zxab134. doi:10.1093/ajhp/zxab134.

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