



# AKPHAN

## ALASKA PUBLIC HEALTH ALERT NETWORK

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*The following message was sent to you through the Alaska Public Health Alert Network (AK PHAN). Please share this information with others who may be interested. Note: Contact information for the Alaska Section of Epidemiology can be found at the end of this message.*

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**Alaska:** This CDC Health Alert Network (HAN) Advisory pertains to a shortage of Becton Dickinson (BD) BACTEC™ blood culture media bottles, which are used for diagnosing bloodstream infections and associated conditions. All laboratory facilities in Alaska that rely on BD BACTEC™ blood culture media bottles should evaluate their inventory levels. If necessary, this CDC HAN outlines strategies for healthcare providers and laboratory professionals to optimize the use of blood cultures during this shortage. Alaska State Public Health Laboratories are not currently affected.



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## Disruptions in Availability of Becton Dickinson (BD) BACTEC™ Blood Culture Bottles

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### Summary

The Centers for Disease Control and Prevention (CDC) is issuing this Health Alert Network (HAN) Health Advisory to inform healthcare providers, laboratory professionals, healthcare facility administrators, and state, tribal, local, and territorial health departments of a critical shortage of Becton Dickinson (BD) BACTEC™ blood culture media bottles. This shortage has the potential to disrupt patient care by leading to delays in diagnosis, misdiagnosis, or other challenges in the clinical management of patients with certain infectious diseases. Healthcare providers, laboratory professionals, healthcare facility administrators, and state, tribal, local, and territorial health departments affected by this shortage should immediately begin to assess their situations and develop plans and options to mitigate the potential impact of the shortage on patient care.

## Background

Blood cultures are critical for assisting healthcare providers with diagnosing patients with bloodstream infections and associated conditions including endocarditis, catheter-related bloodstream infections and sepsis. Blood cultures can identify the microorganisms causing these infections, and follow-on antimicrobial susceptibility testing can be performed to help guide optimal therapy. Repeat blood cultures may be used for patients with certain infections, like *Staphylococcus aureus* bacteremia, to help guide treatment duration. Most blood cultures in the United States are performed using continuous-monitoring blood culture systems; the BD continuous-monitoring blood culture system is used in about half of all U.S. laboratories and is only compatible with BD BACTEC™ blood culture media bottles.

Unnecessary and incorrect blood culture collection are not only detrimental to patient care but can contribute to or exacerbate shortages of blood culture media bottles. Thus, experts in laboratory utilization recommend that all facilities should implement diagnostic stewardship best practices to improve blood culture ordering and collection practices. Several studies have demonstrated that unnecessary blood cultures can be reduced without an increase in adverse events. These studies can serve as a template for collaborative efforts to reduce the number of unnecessary blood cultures performed in healthcare facilities. In addition, CDC offers a quality tool to prevent blood culture contamination and improve diagnostic accuracy.

## Recommendations for Healthcare Providers and Phlebotomists

- Implement [practices](#) to optimize the use of blood cultures at your facility.
- Take [steps](#) to prevent blood culture contamination.
- Ensure that the [appropriate volume](#) is collected when collecting blood for culture.

## Recommendations for Laboratory Professionals and Healthcare Facility Administrators

- Determine the type of blood culture bottles your laboratory or facility uses and whether this shortage will impact you.
- Implement [practices](#) to optimize the use of blood cultures at your facility. Doing so may be helpful even for facilities not affected by the shortage.
- Take [steps](#) to prevent blood culture contamination. Contamination can negatively affect patient care and may require the collection of more blood cultures to help determine whether contamination has occurred.
- Ensure that the [appropriate volume](#) is collected when collecting blood for culture. Underfilling bottles decreases the sensitivity to detect bacteremia/fungemia and may require additional blood cultures to be drawn to diagnose an infection.
- If your laboratory or facility will be impacted by the bottle shortage, determine whether you have alternative options for blood cultures (e.g., working with a nearby facility or sending samples out to a laboratory not affected by the shortage).
- Monitor current and future supplies of blood culture bottles at your laboratory or facility and report any potential shortages or interruptions to the Food and Drug Administration (FDA) at [deviceshortages@fda.hhs.gov](mailto:deviceshortages@fda.hhs.gov).

- If your facility will be impacted by the bottle shortage, convene a group of local laboratory and clinical experts to determine how a limited supply of blood culture bottles will be [prioritized](#) for use in your facility.

## Recommendations for State, Tribal, Local and Territorial Health Departments

- Contact hospitals and laboratories in your jurisdiction that serve acute care patients (i.e., patients who are hospitalized or visiting an emergency department) to determine what type of blood culture bottles they use and whether this shortage will impact them.
- Focus the following interventions on impacted facilities and laboratories:
  - Provide education on the supply shortage, optimal use of blood cultures, and mechanisms for reporting [supply chain shortages or interruptions](#) and suspected [adverse events](#) to the FDA.
  - Facilitate communication between laboratories and facilities willing to assist others in need, either by sharing supplies of available blood culture bottles or working out arrangements for nearby laboratories using continuous monitoring blood culture systems unaffected by the shortage to perform blood cultures on behalf of the affected laboratory or facility.

## For More Information

- [BD Update, CDC Blood Culture Quality Tools, and Blood Culture Utilization | CDC's Laboratory Outreach Communication System \(LOCS\)](#)
- [Disruptions in Availability of BD BACTEC Blood Culture Media Bottles - Letter to Health Care Providers | FDA](#)
- [Medical Device Shortages List | FDA](#)
- [Blood Culture Contamination \(BCC\) Prevention | CDC](#)
- [Preventing Adult Blood Culture Contamination: A Quality Tool for Clinical Laboratory Professionals | CDC](#)
- [Blood Culture Contamination: An Overview for Infection Control and Antibiotic Stewardship Programs Working with the Clinical Laboratory | CDC](#)
- [Guide to Utilization of the Microbiology Laboratory for Diagnosis of Infectious Diseases: 2024 Update by the Infectious Diseases Society of America \(IDSA\) and the American Society for Microbiology \(ASM\)](#)
- [Blood Culture Stewardship | Johns Hopkins Medicine](#)

## References

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2. Fabre V, Klein E, Salinas AB, et al. A Diagnostic Stewardship Intervention To Improve Blood Culture Use among Adult Nonneutropenic Inpatients: the DISTRIBUTE Study. *J Clin Microbiol.* 2020; 58(10): e01053-20. DOI:[10.1128/JCM.01053-20](#)

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#### DEPARTMENT OF HEALTH AND HUMAN SERVICES

#### HAN Message Types

- **Health Alert:** Conveys the highest level of importance about a public health incident.
- **Health Advisory:** Provides important information about a public health incident.
- **Health Update:** Provides updated information about a public health incident.

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This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations.

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This message is sent to you as a service of the State of Alaska, Department of Health, Division of Public Health, through the Section of Epidemiology:

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