UK Health Security Agency

Serial number: BN2026/023 **Date: 16 July 2026**

Event: *Bacillus cereus* contamination of linen in health and adult social care settings

Notified by: **Sarah Milligan, Consultant in Public Health, Incidents, Outbreaks and Infection Guidance (IOIG) Team, AMR & HCAI Division, UKHSA**

Authorised by:

1. Colin Brown, Deputy Director, AMR & HCAI Division
2. Will Welfare, Strategic Response Director On call
3. Trish Mannes, Regional Deputy Director On call
4. Luke Guinness, Senior Communications Manager

Contact: HCAIAMR.IOIG@ukhsa.gov.uk

Distribution: Please see page 4 for information with regards to the distribution instructions for this Briefing Note.

Summary:

UKHSA has been notified by a large healthcare laundry company, which supplies linen to a range of health and adult social care organisations in England, that monthly microbiological testing of linen revealed above threshold counts of *Bacillus cereus (B.cereus)*. UKHSA has been notified that three processing sites in England are affected, however additional sites and other healthcare laundry companies may also be impacted. The organisations served are in multiple regions of England and include a range of acute and non-acute NHS Trusts, private providers, residential adult social care providers, and others.

During periods of hot weather *B.cereus* will increase in the environment which can lead to rises in healthcare settings, particularly with prolonged storage of bed linen in hot environments. At present UKHSA is not aware of any *B. cereus* outbreaks associated with contaminated laundry. The risk to most patients is likely to be very low, with alternative linen processed through different methods provided to high-risk areas (maternity, neonatal, haematology and bone marrow transplant units) as a precautionary measure.

Background and Interpretation:

B. cereus is an environmental Gram-positive, spore forming, thermotolerant aerobic bacterium. It is principally associated with toxin-mediated food poisoning, however in certain contexts, it can cause infection in immunocompromised individuals and neonates, particularly in the presence of indwelling lines and devices. *Bacillus* species can readily be detected in healthcare environments, with residual counts raised during the warm summer months. It is well known to contaminate clean healthcare linen and there have been specific reports of healthcare associated outbreaks and surgical site

infections (1, 2). Contamination is thought to result from replicating *Bacillus* species to high levels on soiled linen and incomplete removal of these heat-resistant spores by water-economic processes such as continuous tunnel washers (CTW). The higher the ambient temperature of soiled linen storage, the greater the bacterial numbers. Problems result during prolonged periods of hot weather over a number of wash cycles. It is not associated with contamination of the washers themselves.

All affected organisations have now been contacted by the company and supplied with relevant information. Trusts supplied by the company, have been offered alternative linen, processed through different methods, for a small number of high-risk units, namely maternity, neonatal, haematology and bone marrow transplant units. This is a precautionary measure, however the evidence to support this intervention is limited. Linen processed through CTW will continue to be provided to organisations, as the risk to most patients/residents outside these high-risk areas is likely to be very low. The company has implemented relevant control measures within the affected sites and counts are expected to decrease over time. However, testing practices for *B. cereus* varies across England, and other healthcare laundry companies could be affected.

HTM 01-04 Decontamination of linen for health and social care provides guidance for those who process linen used in health and adult social care settings such as laundries and linen processors. The linen processor is expected to identify an action point when bacterial counts increase (in conjunction with a risk assessment) that will trigger a notice to customers and alert them to increased vigilance and necessary proactive measures as has occurred in this case. The HTM 01-04 does not prescribe a standardised method for testing or agreed industry threshold levels for *B. cereus*.

Registered providers have to be able to demonstrate compliance with the Health and Social Care Act 2008: code of practice on the prevention and control of infections which includes the provision and maintenance of a clean and appropriate environment in managed premises that facilitates the prevention and control of infections. The organisation's designated decontamination lead is responsible for ensuring that polices are implemented, in line with national guidance and best practice, on the decontamination and disinfection of linen. The National Infection Prevention and Control (IPC) Manual (NHSE) contains guidance on safe linen management with concepts that are transferrable to adult social care settings.

UKHSA's Linen processing within adult social care: information sheet outlines the national guidelines and best practices on the correct handling of linen.

Implications and Recommendations for UKHSA Regions, sites and services:

Affected organisations have been referred to NHS local and regional IPC teams in the first instance. Affected organisations may seek advice from UKHSA Regional Teams, Consultants in Public Health Infection (CPHIs) and UKHSA Microbiologists.

Healthcare organisations should promptly inform UKHSA Health Protection Teams (HPTs) of any *B. cereus* outbreaks, particularly in high-risk patients and neonatal units. HPTs are asked to inform the Incidents, Outbreaks and Infection advice and Guidance (IOIG) team of any *B. cereus* outbreaks via HCAIAMR.IOIG@ukhsa.gov.uk. In the context of outbreak settings, *Bacillus* or suspected Bacillus culture should be sent to the Gastrointestinal Bacteria Reference Unit (GBRU, reference laboratory), Colindale on bijou agar slope, for speciation and typing.

Implications and Recommendations for NHS:

Affected Trusts have been contacted, and they are asked to follow the recommendations as outlined by the company. Affected Trusts are encouraged to perform local risk assessments, including the introduction of any additional protective measures felt necessary while raised levels are prevalent.

All healthcare organisations are advised to monitor blood cultures for *B. cereus* exceedance which may indicate contaminated laundry. Organisations with acute inpatient services should review *B. cereus* sampling arrangements of linen (processed by CTWs) with their linen processor in accordance with agreed local policy and as outlined in HTM 01-04.

Directors of Infection Prevention and Control (DIPCs), IPC leads, IPC teams and other relevant persons such as decontamination leads are advised to review compliance with the Health and Social Care Act 2008: code of practice on the prevention and control of infections (updated December 2022), including relevant national guidance, and best practice, on the decontamination and disinfection of linen. This includes the correct handling, storage and transportation of linen to and from the linen processor. Healthcare organisations are asked to promptly notify UKHSA HPTs of *B. cereus* outbreaks in healthcare settings, particularly relating to high-risk patients and neonatal units. In the context of outbreak settings, *Bacillus* or suspected *Bacillus* culture should be sent to the GBRU reference laboratory, Colindale on bijou agar slope, for speciation and typing. Please indicate that the culture is potentially part of an outbreak.

Implications and recommendations for Local Authorities:

For information, and where appropriate to promote awareness that registered providers should demonstrate compliance with the Health and Social Care Act 2008: code of practice on the prevention and control of infections.

References or Sources of information:

1. Hosein, I.K., et al., Summertime Bacillus cereus colonization of hospital newborns traced to contaminated, laundered linen. J Hosp Infect, 2013. 85(2): p. 149-54

2. Cheng, V.C.C., et al., Seasonal Outbreak of Bacillus Bacteremia Associated With Contaminated Linen in Hong Kong. Clin Infect Dis, 2017. 64(suppl_2): p. S91-s97

3. NHS England » (HTM 01-04) Decontamination of linen for health and social care

4. https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance

5. NHS England » National infection prevention and control manual (NIPCM) for England

6. UKHSA, Linen processing within adult social care: information sheet

Instructions for Cascade:

Briefing Notes are routinely cascaded to the below groups:

- UKHSA Private Office Groups who cascade onwards within Groups
- UKHSA Health Protection in Regions:
    - UKHSA Field Services
    - UKHSA Health Protection Teams including UKHSA Regional Deputy Directors
    - Deputy Directors in Regions Directorate
- UKHSA Lab Management Teams
- UKHSA Regional Communications
- Generic inbox for each of the Devolved Administrations
- Inboxes for each of the Crown Dependencies
- UKHSA UKOT Programme SPOC
- DHSC CMO (*excluding internal UKHSA briefing notes*)
- OHID Regional Directors of Public Health
- National NHSE Emergency Preparedness, Resilience and Response (EPRR)
- NHSE National Operations Centre

- **Devolved Administrations** to cascade to Medical Directors and other DA teams as appropriate to their local arrangements.
- **Crown Dependencies** to cascade to teams as appropriate to local arrangements.
- **UKHSA Regional Deputy Directors** to cascade to Directors of Public Health
- **UKHSA microbiologists** to cascade to non-UKHSA labs (NHS labs and private)
- **UKHSA microbiologists** to cascade to NHS Trust infection leads
- **NHS labs/NHS infection leads/NHS microbiologists/NHS infectious disease specialists** to cascade as appropriate within Trust to include decontamination leads and laundry managers
- **NHSE National Operations Centre** to cascade to NHS national and regional IPC representatives

.

- Healthcare Infection Society (HIS) - admin@his.org.uk
- Infection Prevention Society (IPS) - info@ips.uk.net