

Reference:	FOI.6548.21
Subject:	Disinfection systems and Healthcare Associated Infections
Date of Request:	26 July 2021

Requested:

1. Does your organisation currently purchase any of the following or similar disinfection systems:
 - Hydrogen Peroxide Vapour Disinfection Systems
 - Mobile Ultraviolet Light Disinfection Systems
 - Electrostatic Disinfection Systems
2. From which suppliers do you obtain these systems, and can you confirm the spend in the last 2 years?
3. Were these systems purchased through a tender or framework? If so, which one? Please provide the following details:
 - Name
 - Reference
 - Where this was published
4. Are you under contract with your current supplier(s) for the above? If so, what is the start and end date(s) of the contract(s)?
5. Can you provide the name and contact details for the person(s) responsible for procuring these systems?
6. Can you provide contact details for the department responsible for managing this service or more broadly infection, prevention, and control?
7. Within this sector, are peer-reviewed studies considered a part of your selection for suppliers?
8. Many ultraviolet disinfection systems use Mercury bulbs - can you confirm if your systems use these alongside your associated environmental management procedures?
9. How many Hospital Acquired Infections (HAI) have there been in the last 2 years?
10. What are the types of HAIs?
11. What is the cost per HAI?
12. What would be a reasonable cost per room for disinfection?
13. How long does it take to turnover a room?
14. What percentage of surfaces get disinfected during a room turnover?
15. What log reduction is expected for surface disinfection?

Response:

1. Hywel Dda University Health Board (UHB) confirms that it has purchased Hydrogen Peroxide Vapour (HPV) and Mobile Ultraviolet (UV) Light Disinfection Systems. The UHB confirms that it has not purchased any Electrostatic Disinfection Systems.
2. As the information requested relates to expenditure for services with a third party, Hywel Dda University Health Board (UHB) considers that Section 43 of the Freedom of Information Act 2000 (FoIA) applies, as answering could be prejudicial to its commercial interests. Section 43(2) exempts information, disclosure of which would or would be likely to prejudice the commercial interests of any person; in this case, the provider listed above. Commercial interests may be prejudiced where disclosure would, or would be likely to:
 - Weaken a company's position in a competitive environment by revealing market sensitive information or information of potential usefulness to its competitors
 - Damage a company's business reputation or the confidence that customers/users, suppliers or investors may have in it.

This exemption is qualified and therefore, even if information falls within Section 43, public authorities must then apply the public interest test set out in Section 2(2)(b).

The information can only be withheld if the public interest in maintaining the exemption outweighs the public interest in disclosure.

The UHB has therefore considered the following:

In favour of disclosure: There is a public interest in transparency and in the accountability of public funds. Furthermore, it is in the public interest that public funds be used effectively and that public sector bodies obtain the best value for money when contracting for the provision of services. Private sector bodies engaging in commercial activities with the public sector must expect some information about those activities to be disclosed.

Against Disclosure: Disclosure of this information would have a direct impact and may cause substantial harm to the contractor. It would disclose its costs and products/services provided to the UHB, and it is likely that this would damage its ability to work within a highly competitive sector. The information being requested is likely to be used by competitors to gain a competitive advantage.

Decision: - The UHB considers that the public interest in withholding its expenditure is not greater than the interest in disclosure, demonstrating the UHB's commitment to openness and transparency. Therefore, the UHB provides the information requested below.

The UHB provides within the table below, the suppliers' names of the disinfection systems above and the total spend, during the period 1 August 2019 to 31 July 2021.

System	Supplier	Total spend
HPV	Nanosonics Europe Ltd (Maintenance and servicing)	£28,460.82
Mobile UV Light	Gama Healthcare	£220,000.00 excluding VAT
	Mansfield Pollard UVent	£11,000.00 excluding VAT.

3. The UHB confirms that the systems were procured via Framework agreements. The details requested are provided within the table below.

Framework	HPV system	Mobile UV light system
Name	All Wales Framework managed by NHS Wales Shared Services Partnership (NWSSP), please re-direct to shared.services@wales.nhs.uk	Countess of Chester Hospital Commercial Procurement Services
Reference		F/039/UVC/16/LH
Published		Direct Award

4. The UHB confirms that it does have a maintenance and servicing contract with Nanosonics Europe Ltd which commenced on 1 April 2021 and expires on 31 March 2022.

5. The UHB confirms that the systems were procured by the Procurement Department in NHS Wales Shared Services Partnership (NWSSP). Contact details are as follows:

ProcurementServicesenquiries@wales.nhs.uk or NHS Wales Shared Services Partnership – Procurement Services, 4th Floor, Companies House, Crown Way, Cardiff, CF14 3UB.

6. The UHB confirms that Mandy Rayani, Executive Director of Nursing, Quality and Patient Experience has overall responsibility for Infection Prevention and Control (IPC).

7. The UHB does not hold this information. We therefore suggest you re-direct this part of your request to the FOI Team in NWSSP who may be able to help you further. The contact details have been provided at question 3.

8. The UHB confirms that the Gama UV-360 system currently in use does uses low-pressure mercury lamps that emit shortwave UV-C radiation. The lamps contain a proprietary encapsulation that protects against shattered glass and mercury from escaping in the event of breakage. They are considered non-hazardous waste and are safe for handling and disposal. The lamps are disposed of in line with the UHB’s Waste Management Policy, which is available on the UHB’s website and can be accessed via the attached link:

<https://hduhb.nhs.wales/about-us/governance-arrangements/policies-and-written-control-documents/policies/waste-management-policy-prevention-safe-handling-sustainable-disposal/>

9. & 10. The UHB provides, within the table below, the number of Hospital Acquired Infections (HAI) and the type of HAI recorded during the period 1 September 2019 and 31 August 2021.

Type of HAI	Number of HAI
Clostridium difficile	62
Staphylococcus aureus Bacteraemia	32
Escherichia coli Bacteraemia	80

11. The UHB is unable to provide specific costs per HAI as these are not held. However, if a patient is diagnosed with a HAI, they can expect their stay in hospital to be extended by an average of eleven (11) days. With those patients that acquire a Clostridium difficile HAI, this can be extended to twenty-eight (28) days. During the financial year 2017/18, the average daily cost of a stay on a medical ward was £399.49. This does not include any medication or antibiotic treatment, the cost of which will vary dependent on the antibiotic used.

12. The UHB does not hold this information.

13. The UHB confirms that an individual side room deep clean takes approximately one (1) hour, with an additional half an hour for UV cleaning.

14. The UHB confirms that 100% of surfaces are disinfected by UV cleaning.

15. The UHB would expect a log reduction of between four (4) and six (6) depending on the technology used and the microbial load within the environment.