

Guideline response to COVID-19 on the CRBSI prevention

- **World Health Organization (WHO) - Interim Guidance on clinical management of severe acute respiratory infection when novel coronavirus (ncov) infection is suspected.**

'Reducing risk of CRBSI: Use a checklist with completion verified by a real-time observer as reminder of each step needed for sterile insertion and as a daily reminder to remove catheter if no longer needed.'¹

* Above recommendation is based on SHEA Practice Recommendations; Strategies to prevent central line-associated bloodstream infections in acute care hospitals: 2014 update. Under special approaches to CLABSI prevention SHEA is recommending use of CHG impregnated dressings and disinfecting caps. Both are included in the Checklist published in 2018 and based on SHEA 2014 and CDC 2011 recommendations^{2,3}.

- **Italian Society of Anesthesia Analgesia Reanimation and Intensive Care (SIAARTI) – Choice and management of vascular access in the context of COVID-19 outbreak in Italy: Recommendations from clinical practice.**⁴

'The use of chlorhexidine-releasing dressings is also recommended for all short-term non-tunneled central venous catheters, so to reduce the risk of catheter-related blood stream infections due to extraluminal contamination, as suggested by most recent studies'

- **Spanish Association of Intensive Care Medicine (SEMICYUC)**⁵. Due to the suspected increase in HAI rates (including CRBSI) during COVID-19 crisis and given the possible existence of the second outbreak later in 2020, the Advisory Council for Safety Projects in critically ill patients proposes to develop the following measures in the short term:
 1. **Immediately recover the recommended standards in the ICUs in the Bacteremia Zero (BZ), Pneumonia Zero (NZ), Resistencia Zero (RZ) and ITU-Zero projects. Project leaders in each ICU must audit their compliance.**
 2. **Train health personnel**, who have joined the assistance of critically ill patients during the pandemic, in the recommendations of the zero projects. Its compliance falls on the Medical Directorate of hospitals.
 3. **Adapt the recommendations of the zero projects to the exceptional care conditions of the epidemic periods and develop protocols** for the care of the devices during the transfers or prone position. The teams that coordinate these projects must present a proposal as soon as possible.

Links\references:

1. [https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-(ncov)-infection-is-suspected)
2. Marschall J, Mermel LA, Fakih M, et al. Strategies to prevent central line-associated bloodstream infections in acute care hospitals: 2014 update. *Infect Control Hosp Epidemiol.* 2014;35(7):753-71.
3. <https://www.cdc.gov/hai/pdfs/bsi/checklist-for-clabsi.pdf>
4. Vailati D, Montrucchio G, Cerotto V, et al. Choice and management of vascular access in the context of COVID-19 outbreak in Italy: Recommendations from clinical practice. *The Journal of Vascular Access.* November 2020. doi:10.1177/1129729820968415
5. <https://semicyuc.org/wp-content/uploads/2020/06/Declaraci%C3%B3n-del-Comit%C3%A9-Asesorador-del-Programa-de-Seegurid-ad-de-Pacientes-Cr%C3%ADticos.pdf>

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- **Spanish Association of Intensive Care Medicine (SEMICYUC): ADAPTATION OF THE ICU ZERO PROJECTS DURING SARS-CoV-2 PANDEMIC (SEMICYUC, TRY OF HEALTH), update 20.Oct⁶.**

Adaptation of Bacteraemia Zero project recommendations:

Hygienic handling of catheters: Reduce the manipulation of connections to the absolute minimum and clean the catheter injection sites with 70% isopropyl alcohol before accessing the IV system. **Category IA.**

Adaptation proposals:

- **In situations of high healthcare pressure or insufficient human resources, consider introducing devices that facilitate the hygienic handling of the devices (*eg caps with alcohol*).**

Links\references:

6. https://www.msbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/ADAPTACION_EN_LA_UCI_DE_LAS_RECOMENDACIONES_DE_LOS_PROYECTOS_ZERO-COVID19-V1.pdf

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