

Chlorhexidine gluconate antiseptics and chemical skin injuries (including burns) in neonates

The use of chlorhexidine gluconate (CHG) solutions (both alcohol and aqueous based), for skin antiseptics prior to invasive procedures, has been associated with chemical skin injuries, including burns, in neonates. Chemical injury in a neonate (pre-term and term) is defined as a newborn infant of any gestational age with the following: chronological age < 28 days AND chemical skin injury (irritative contact dermatitis ranging from erythema to chemical burn with or without necrosis/ulceration).

Your contribution is greatly appreciated.

1. Which of the following best describes your practice?
 General paediatrician Paediatric subspecialist; specify: _____ Other, specify: _____
2. Please indicate your years of practice: (Check only one) <5 years 5–10 years 10–20 years >20 years
3. Where do you practice predominantly? (Check all that apply)
 - a) Urban Suburban Rural/Remote
 - b) Academic Non-academic
 - c) Inpatient hospital ward ED/Urgent care centre Outpatient clinic Private office/Community setting
4. Does your practice include the care of hospitalized neonates? Yes No
5. If yes, do you use chlorhexidine gluconate (CHG) solutions for antiseptics before invasive procedures (i.e., umbilical or PICC lines, IVs, venipuncture, lumbar puncture, injections, etc.) in neonates? Yes No

If you provide care for neonates and use CHG solutions for antiseptics, please complete questions 6 to 11.

If NOT, thank you for your participation in this survey.

6. What formulation of CHG do you use in your practice? (Check only one)
 Single-use swab/applicator Multi-use solution bottle Both types Don't know
7. What types of CHG solutions do you use? Aqueous Alcohol Both types Don't know
8. Which concentration of CHG do you use? (Check all that apply)
 0.05% aqueous 0.5% aqueous 2% aqueous 4% aqueous 0.5% alcohol
 2% alcohol 4% alcohol 20% alcohol Don't know
9. In the **last 12 months**, have you seen any serious chemical skin injuries (including second- and third-degree burns) due to CHG use? Yes No *If yes, provide the number of cases: _____*
 In the **last 5 years**? Yes No *If yes, provide an estimate of the number of cases: _____*

If no cases seen, please proceed to question 11.

10. For cases of serious chemical skin injuries in neonates due to CHG use seen in the last 12 months:

	Case 1	Case 2	Case 3	Case 4	Case 5
Gestational age	<input type="checkbox"/> < 32 weeks <input type="checkbox"/> 32–36 weeks <input type="checkbox"/> > 36 weeks <input type="checkbox"/> Don't know	<input type="checkbox"/> < 32 weeks <input type="checkbox"/> 32–36 weeks <input type="checkbox"/> > 36 weeks <input type="checkbox"/> Don't know	<input type="checkbox"/> < 32 weeks <input type="checkbox"/> 32–36 weeks <input type="checkbox"/> > 36 weeks <input type="checkbox"/> Don't know	<input type="checkbox"/> < 32 weeks <input type="checkbox"/> 32–36 weeks <input type="checkbox"/> > 36 weeks <input type="checkbox"/> Don't know	<input type="checkbox"/> < 32 weeks <input type="checkbox"/> 32–36 weeks <input type="checkbox"/> > 36 weeks <input type="checkbox"/> Don't know
Chronological age	<input type="checkbox"/> < 2 weeks <input type="checkbox"/> > 2 weeks <input type="checkbox"/> Don't know	<input type="checkbox"/> < 2 weeks <input type="checkbox"/> > 2 weeks <input type="checkbox"/> Don't know	<input type="checkbox"/> < 2 weeks <input type="checkbox"/> > 2 weeks <input type="checkbox"/> Don't know	<input type="checkbox"/> < 2 weeks <input type="checkbox"/> > 2 weeks <input type="checkbox"/> Don't know	<input type="checkbox"/> < 2 weeks <input type="checkbox"/> > 2 weeks <input type="checkbox"/> Don't know
Weight range at time of injury	<input type="checkbox"/> < 500 grams <input type="checkbox"/> 500 grams–1 kg <input type="checkbox"/> 1–2 kg <input type="checkbox"/> > 2 kg	<input type="checkbox"/> < 500 grams <input type="checkbox"/> 500 grams–1 kg <input type="checkbox"/> 1–2 kg <input type="checkbox"/> > 2 kg	<input type="checkbox"/> < 500 grams <input type="checkbox"/> 500 grams–1 kg <input type="checkbox"/> 1–2 kg <input type="checkbox"/> >2 kg	<input type="checkbox"/> < 500 grams <input type="checkbox"/> 500 grams–1 kg <input type="checkbox"/> 1–2 kg <input type="checkbox"/> > 2 kg	<input type="checkbox"/> < 500 grams <input type="checkbox"/> 500 grams–1 kg <input type="checkbox"/> 1–2 kg <input type="checkbox"/> > 2 kg

Formulation of CHG product(s) involved	<input type="checkbox"/> One-time use swab <input type="checkbox"/> Multiple-use solution <input type="checkbox"/> Don't know	<input type="checkbox"/> One-time use swab <input type="checkbox"/> Multiple-use solution <input type="checkbox"/> Don't know	<input type="checkbox"/> One-time use swab <input type="checkbox"/> Multiple-use solution <input type="checkbox"/> Don't know	<input type="checkbox"/> One-time use swab <input type="checkbox"/> Multiple-use solution <input type="checkbox"/> Don't know	<input type="checkbox"/> One-time use swab <input type="checkbox"/> Multiple-use solution <input type="checkbox"/> Don't know
Type of CHG solution involved	<input type="checkbox"/> Aqueous <input type="checkbox"/> Alcohol <input type="checkbox"/> Don't know	<input type="checkbox"/> Aqueous <input type="checkbox"/> Alcohol <input type="checkbox"/> Don't know	<input type="checkbox"/> Aqueous <input type="checkbox"/> Alcohol <input type="checkbox"/> Don't know	<input type="checkbox"/> Aqueous <input type="checkbox"/> Alcohol <input type="checkbox"/> Don't know	<input type="checkbox"/> Aqueous <input type="checkbox"/> Alcohol <input type="checkbox"/> Don't know
Type of setting where CHG solution was applied	<input type="checkbox"/> Community hospital <input type="checkbox"/> Tertiary hospital <input type="checkbox"/> Nursing station <input type="checkbox"/> Home <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Community hospital <input type="checkbox"/> Tertiary hospital <input type="checkbox"/> Nursing station <input type="checkbox"/> Home <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Community hospital <input type="checkbox"/> Tertiary hospital <input type="checkbox"/> Nursing station <input type="checkbox"/> Home <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Community hospital <input type="checkbox"/> Tertiary hospital <input type="checkbox"/> Nursing station <input type="checkbox"/> Home <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Community hospital <input type="checkbox"/> Tertiary hospital <input type="checkbox"/> Nursing station <input type="checkbox"/> Home <input type="checkbox"/> Other, specify: _____
Treatment required	<input type="checkbox"/> Simple pain control/wound care <input type="checkbox"/> Skin grafting <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Simple pain control/wound care <input type="checkbox"/> Skin grafting <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Simple pain control/wound care <input type="checkbox"/> Skin grafting <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Simple pain control/wound care <input type="checkbox"/> Skin grafting <input type="checkbox"/> Other, specify: _____	<input type="checkbox"/> Simple pain control/wound care <input type="checkbox"/> Skin grafting <input type="checkbox"/> Other, specify: _____
Outcome	<input type="checkbox"/> No interruption in care <input type="checkbox"/> Sepsis <input type="checkbox"/> Hospitalization/prolongation of hospitalization <input type="checkbox"/> Death <input type="checkbox"/> Other, specify: _____ _____	<input type="checkbox"/> No interruption in care <input type="checkbox"/> Sepsis <input type="checkbox"/> Hospitalization/prolongation of hospitalization <input type="checkbox"/> Death <input type="checkbox"/> Other, specify: _____ _____	<input type="checkbox"/> No interruption in care <input type="checkbox"/> Sepsis <input type="checkbox"/> Hospitalization/prolongation of hospitalization <input type="checkbox"/> Death <input type="checkbox"/> Other, specify: _____ _____	<input type="checkbox"/> No interruption in care <input type="checkbox"/> Sepsis <input type="checkbox"/> Hospitalization/prolongation of hospitalization <input type="checkbox"/> Death <input type="checkbox"/> Other, specify: _____ _____	<input type="checkbox"/> No interruption in care <input type="checkbox"/> Sepsis <input type="checkbox"/> Hospitalization/prolongation of hospitalization <input type="checkbox"/> Death <input type="checkbox"/> Other, specify: _____ _____

11. To your knowledge, does a guideline for skin antiseptics in neonates exist at your practice institution? (Check one)

Yes No Don't know

If no, would you deem developing one useful? Yes No

Investigators: M Faraci, M Zimmerman

Please return this survey with your monthly reporting form. Thank you for your participation.

05-2017