

B5. Skin tolerability survey of hand hygiene materials

Specific objectives:

- 1) To test skin safety of different 0.05% chlorine solutions (calcium hypochlorite, sodium hypochlorite, and sodium dichloroisocyanurate) used in routine hand hygiene during patient care

Steps:

- 1) Provide privacy advisory statement:
 “Information is being collected for this survey under the authority of 10 U.S.C. 2358, Research and Development Projects; DoDI2000.30, Global Health Engagement (GHE) Activities; the Fiscal Year (FY) 2013 National Defense Authorization Act (NDAA); and E.O. 13747, Advancing the GlobalHealth Security Agenda to Achieve a World Safe and Secure from Infectious Disease Threats; and will be used to help the DoD Center for Global Health Engagement to understand and evaluate hospital hand hygiene policies and practices. No personally identifiable information (PII) is being collected from you, and all information will be de-identified prior to being reported. Completing the survey is voluntary; you may stop the survey at any time and skip any questions you choose. There is no penalty if you choose not to respond, although maximum participation is encouraged so the data will be complete and representative.”
- 2) Volunteers will use 0.05% chlorine solutions to rinse hands for routine hand hygiene during patient care activities for 3-5 days consecutive days
- 3) Volunteers will answer questions about skin health and irritation pre- and post-testing
- 4) Field researcher will examine volunteer hands pre- and post-testing for signs of skin irritation

	Survey identification	Answer choices	Skip pattern
1)	Date of survey	__ / __ / __	
2)	Participant ID	_____	
3)	Participant age	__ years	
4)	Participant sex	<ul style="list-style-type: none"> • 1. Male • 2. Female • 3. Other or prefer not to specify 	
5)	Care provider group	<ul style="list-style-type: none"> • 1. Administration / leadership • 2. Doctor • 3. Medical student • 4. Nurse • 5. Midwife • 6. Nursing student • 7. Support staff • 8. Family caregiver • 9. Other (a. Specify__) 	
6)	Present season	<ul style="list-style-type: none"> • 1. Rainy • 2. Dry 	

		• 3. Other (a. Specify___)	
7)	Field researcher ID	-----	

	Baseline skin and activities (to be answered by participants only on pre-testing)	Answer choices	Skip pattern
8)	Do you have skin problems in general?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	
9)	Do you have activities outside of hospital work likely to cause damage to your skin?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	
10)	How often do you normally use a protective hand lotion/cream?	<ul style="list-style-type: none"> • 1. Several times a day • 2. Once a day • 3. Several times a week • 4. Once a week • 5. Rarely • 6. Never • 7. Other (a. Specify___) 	
11)	Do you develop skin irritation?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	If 2, go to q13.
12)	How often do you develop skin irritation?	<ul style="list-style-type: none"> • 1. Several times a day • 2. Once a day • 3. Several times a week • 4. Once a week • 5. Rarely • 6. Never • 7. Other (a. Specify___) 	
13)	Do you develop skin rashes?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	If 2, go to q15.
14)	How often do you develop skin rashes?	<ul style="list-style-type: none"> • 1. Several times a day • 2. Once a day • 3. Several times a week • 4. Once a week • 5. Rarely • 6. Never • 7. Other (a. Specify___) 	
15)	Do you develop dry skin?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	If 2, go to q17.

16)	How often do you develop dry skin?	<ul style="list-style-type: none"> • 1. Several times a day • 2. Once a day • 3. Several times a week • 4. Once a week • 5. Rarely • 6. Never • 7. Other (a. Specify___) 	
17)	Do you have asthma?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	
18)	Do you develop allergies or irritation to skin products?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	If 2, go to q20.
19)	If yes, which products?	_____	
20)	Can you use alcohol-based products?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	
21)	Can you use chlorine-based products?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	
22)	Do you work full-time?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	If 2, go to q24.
23)	If part-time, what % time do you work in the hospital?	<ul style="list-style-type: none"> • 1. Less than 50% • 2. 50% • 3. 60% • 4. 70% • 5. 80% • 6. 90% • 7. Other (a. Specify___) 	

	Questions about pre- and post-testing skin condition	Answer choices	Skip pattern
24)	How often do you have direct contact with patients during your working day?	<ul style="list-style-type: none"> • 1. Less than once per day • 2. 1 to 5 times per day • 3. 6 to 10 times per day • 4. 11 to 15 times per day • 5. More than 15 times per day • 6. Other (a. Specify___) 	
25)	On average, how often do you practice hand hygiene during a working hour?	<ul style="list-style-type: none"> • 1. Less than once per day 	

		<ul style="list-style-type: none"> • 2. 1 to 5 times per day • 3. 6 to 10 times per day • 4. 11 to 15 times per day • 5. More than 15 times per day • 6. Other (a. Specify___) 	
26)	In what percentage of times where hand hygiene is recommended, do you clean your hands?	<ul style="list-style-type: none"> • 1. Never, 0% • 2. 10% • 3. 20% • 4. 30% • 5. 40% • 6. 50% • 7. 60% • 8. 70% • 9. 80% • 10. 90% • 11. Always, 100% 	
27)	How is the overall health of the skin on your hands now?	<ul style="list-style-type: none"> • 1. Very bad • 2. Bad • 3. Normal • 4. Good • 5. Perfect 	
28)	What is the appearance of the skin on your hands now? (Any redness, blotchiness, or rashess?)	Abnormal ●●●●●●●● Normal	
29)	What is the structural condition of the skin on your hands now? (Any cuts, cracks, abrasions, or fissures?)	Abnormal ●●●●●●●● Normal	
30)	What is the moisture content of the skin on your hands now? (Any dryness?)	Abnormal ●●●●●●●● Normal	
31)	How does the skin on your hands feel to you now? (Any itching, burning, or sore sensations?)	Abnormal ●●●●●●●● Normal	
32)	How is the overall health of the skin on your hands now?	Very altered ●●●●●●●● Perfect	

Module below is for post-testing only

	Post-testing: Questions for participant	Answer choices	Skip pattern
1)	How many consecutive working days did you	• 1. 1 day	

	use the test product?	<ul style="list-style-type: none"> • 2. 2 days • 3. 3 days • 4. 4 days • 5. 5 days • 6. Other (a. Specify___) 	
2)	Did the present study change your hand hygiene practice?	<ul style="list-style-type: none"> • 1. Yes • 2. No 	If 2, go to q4.
3)	If yes, how did your hand hygiene change?	<ul style="list-style-type: none"> • 1. Increased • 2. Decreased • 3. Other (a. Specify___) 	
4)	What is your opinion of the test product for hand hygiene: regarding color?	Unpleasant ●●●●●●●● Pleasant	
5)	Smell?	Unpleasant ●●●●●●●● Pleasant	
6)	Texture?	Very sticky ●●●●●●●● Not sticky at all	
7)	Causing any irritation (any stinging)?	Very irritating ●●●●●●●● Not at all	
8)	Causing any drying?	Very much ●●●●●●●● Not at all	
9)	Ease of use?	Very difficult ●●●●●●●● Very easy	
10)	Speed of drying?	Very slow ●●●●●●●● Very fast	
11)	Application?	Very unpleasant ●●●●●●●● Very pleasant	
12)	What is your overall opinion of the test product?	Dissatisfied ●●●●●●●● Very satisfied	
13)	Are there differences between the test product and the product used for hand hygiene in your hospital?	Major differences ●●●●●●●● None	
14)	Which product do you prefer?	<ul style="list-style-type: none"> • 1. Usual product • 2. Test product • 3. No preference 	
15)	Do you think the test product could increase your hand hygiene practice?	Definitely ●●●●●●●● Not at all	

Record any field notes or comments on skin surveys or observations: