



Welcome to the SCIN study intervention

This intervention aims to support ICU nurses to protect themselves from hand dermatitis





Welcome to the SCIN study intervention

- This magazine has been developed as part of a study aiming to reduce hand dermatitis among ICU nurses
- It's been developed by a team of experts in occupational health, skin care and infection control, including:
 - Dr Ira Madan – consultant occupational physician
 - Dr John English- consultant in occupational dermatology
 - Prof Barry Cookson – expert in microbiology and infection control, former Director of the Laboratory of Healthcare Associated Infection at the Health Protection Agency
- Reading this magazine should take you no more than twenty minutes



What is hand dermatitis?

- **Dermatitis is a skin condition caused by contact with a substance that irritates the skin**



- **Key symptoms are:**
 - Dryness
 - Itching
 - Redness on the hands
- **Which can develop into:**
 - Flaking
 - Scaling
 - Cracks
 - Swelling
 - Blisters



Why are ICU nurses at high risk of hand dermatitis?

- Providing critical care requires frequent and repeated hand cleansing, often with soap and water rather than hand rubs
- Repeated contact with irritant substances, such as soap, and repeated contact with water both prevent the skin barrier working as well as it should
- This can lead to inflammation, or dermatitis
- Given how often they have to clean their hands, ICU nurses are at much more risk of developing hand dermatitis than most other nurses





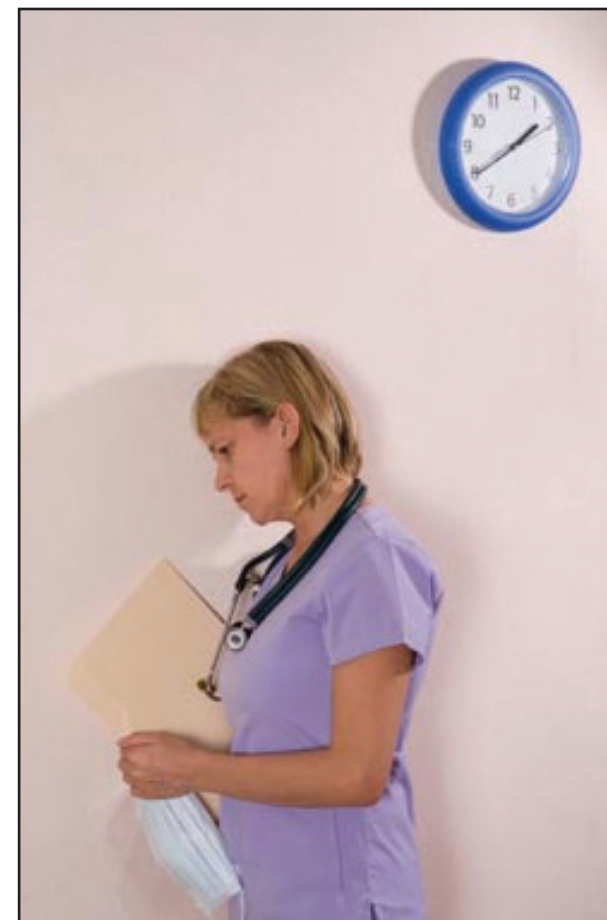
Why all ICU nurses are at risk of hand dermatitis

- Repeated contact with irritants leads to micro (invisible) damage to the skin
- Repeated micro damage builds up over time until finally the skin can take no more and erupts into visible dermatitis
- Therefore, even nurses who have practiced for years without getting hand dermatitis still need to take steps to protect themselves



What are the consequences of hand dermatitis for nurses?

- Hand dermatitis is unsightly, itchy and painful
- In bad cases, dermatitis can make it hard for nurses to continue working as they can't perform the necessary hand hygiene tasks
- One staff nurse at Guy's and St Thomas' NHS Foundation Trust told us:
 - “My hand dermatitis got so bad I thought that if it got any worse I would have to question my career in nursing. I never realised how debilitating the condition could be, and I don't think others do until they are affected.”

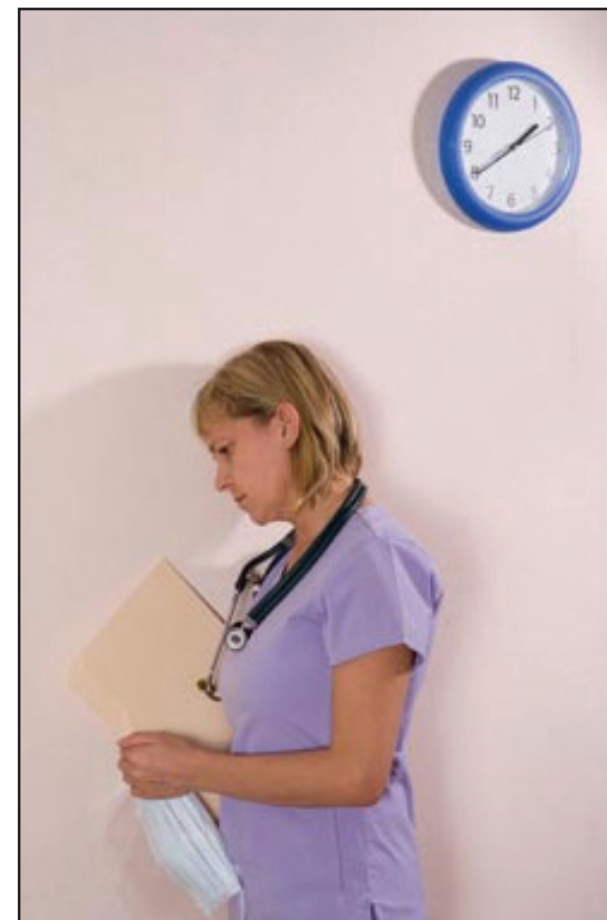




What are the consequences of hand dermatitis for nurses?

● Hand dermatitis can affect infection control

- Broken and inflamed skin is more likely to be colonised by pathogens
- Nurses with hand dermatitis could unknowingly transmit these pathogens to the patients they're caring for
- The pathogens could also lead to the nurses getting infected dermatitis





Effective strategies for preventing hand dermatitis

- There are various factors that influence your chances of getting hand dermatitis:
 - Using moisturising hand cream
 - Appropriate use of hand rubs and hand washing
 - Using gloves appropriately
 - Taking action when you see early signs of hand dermatitis



Moisturising hand creams – the benefits

● Regular use of moisturising hand cream benefits:

- You
 - It's proven to protect nurses from hand dermatitis
 - Hands feel more comfortable and look less rough
 - Will help you avoid developing dermatitis so severe that you have to take time off work
- Infection control
 - Healthy skin is less likely to harbour pathogens



Frequently Asked Questions

Question: How often do I need to use the hand cream?

Answer: At least five times a day. Before you start work, during each of your breaks, and at the end of your shift



Frequently Asked Questions

Question: How do I avoid the cream making my hands feel greasy?

Answer: Using a 5p sized blob of hand cream, and rubbing it in for at least 30 seconds should get rid of any greasy feeling. Make sure to cover all surfaces of your hands



Frequently Asked Questions

Question: Could the hand cream itself be an infection control risk?

Answer: Not if it's in a dispenser

In the past, there have been cases of healthcare associated infections linked to nurses sharing the same tub of hand cream

However, the modern dispenser prevents people's hands (and any pathogens on them) coming into contact with the cream inside



Frequently Asked Questions

Question: After using the cream, my skin feels a bit damp. Does that mean bacteria might grow on it?

Answer: No. We consulted Professor Barry Cookson, an expert in healthcare associated infections and a member of our study team. He said there is no research evidence showing that pathogens grow faster on skin treated with hand cream compared to skin that hasn't been treated



Frequently Asked Questions

Question: Do I have time for this?

Answer: We know how busy ICU nurses are. That is why we're suggesting you use the hand cream several times a day, rather than every time you clean your hands



Getting into the hand cream habit

- Research shows that the most common reason nurses don't follow hand care advice at work is because they're too busy thinking about other things they need to do and so simply forget
- You are more likely to get round to using hand cream if you make a decision about the time and place you will do so
- For best protection against dermatitis, you need to use hand cream at the start and end of your shift, and when you go on breaks



Getting into the hand cream habit

- Let's start by thinking about the beginning and end of your shift. We want you to plan to use hand cream as you enter and leave the ICU
- Where is the nearest hand cream dispenser to where you enter the ICU?
 - For example, "next to the sink"
 - Write this location into the plan below:

Your hand cream plan

If I'm about to start or end my shift, and I go past the hand cream dispenser that is _____, then I'll use the cream on my hands

Please read your plan three times to yourself. This helps make using the cream a habit.



Getting into the hand cream habit

- Now, think about what you do just before you go on your breaks
- Where is the nearest hand cream dispenser to where you clean your hands before going on a break?
 - For example, “above the last sink”
 - Write this location into the plan below:

Your plan

If I'm about to go on a break and have cleaned my hands, then I'll go to the hand cream dispenser that is _____ and use the cream

Please read your plan three times to yourself. This helps make using the cream a habit.



Gloves and dermatitis

- Many ICU tasks require nurses to wear gloves for infection control purposes
- This makes it difficult to reduce the amount of time you wear gloves for
- Unfortunately, wearing gloves increases your risk of hand dermatitis by disrupting how your skin naturally stays healthy





Gloves and dermatitis

- **How does wearing gloves increase dermatitis risk?**
 - **Dermatitis risk increases when the underlying tissues of the skin get dehydrated**
 - **Your skin retains water thanks to substances called natural moisturising factors**
 - **Gloves prevent sweat evaporating, making the skin soggy**
 - **When the skin's soggy, the body makes fewer natural moisturising factors**
 - **Having fewer natural moisturising factors means that your skin's ability to retain water in the underlying tissues is reduced**
 - **Your skin gets dehydrated more easily, increasing dermatitis risk**



Gloves and dermatitis

So, what can you do?

- Make sure you take gloves off at the first moment it's appropriate to do so
- Use hand cream regularly to balance out the effects of gloves on your skin's natural ability to moisturise itself



Hand rubs, hand washing and hand care

- Your decisions about whether to use hand rubs or to wash your hands with soap must always be in line with your workplace's infection control policy
- However, some nurses think hand rubs are worse for their hands than washing them with soap and water
- This can lead to them washing their hands even when using hand rubs would be okay from an infection control point of view



Which is worse for your hands – hand rubs or washing with soap and water?

● Evidence shows that hand washing is worse for the skin than hand rubs

- Soap is alkaline. The epidermis (top layer) of the skin is slightly acidic, which helps neutralise micro-organisms that are usually alkaline in nature
- If the skin is repeatedly washed with alkaline soaps, then its pH balance gets disturbed. This reduces its protection
- Therefore, hand washing with soap is worse for your hands than using hand rubs





Which is worse for your hands – hand rubs or washing with soap and water?

- In contrast to the damaging effects of soap, all hand rubs used in the NHS contain moisturisers, so they have a moisturising effect
 - Important! To get this benefit, the rub must be rubbed into the hands until dry
 - If hand rubs sting your hands that is an early sign of skin damage
 - Try using extra moisturising hand cream for the next week and see if the stinging's reduced
 - If extra hand cream doesn't help, you should consider seeking advice from occupational health



Hand dermatitis symptoms?

Talk to your occupational health (OH) department

- It's good practice to check your hands at least once a month for the signs of dermatitis:
 - Redness
 - Scaling/flaking
 - Blistering
 - Weeping
 - Cracking
 - Swelling
 - Hands with dermatitis can feel itchy, tight or painful
- If you get any of these symptoms for more than a couple of days, it would be a good idea to seek support from your OH department



Hand dermatitis symptoms? Talk to your occupational health (OH) department

- **Your OH service wants to prevent the serious consequences of hand dermatitis for nurses**
 - **“The sooner nurses consult us, the sooner we can put a plan in action to get their symptoms under control. The longer a nurse puts up with dermatitis symptoms before coming to see us, the more difficult it is to treat.”**

Ira Madan, consultant occupational physician,
Guy's and St Thomas' NHS Trust



Ira Madan



Why go to occupational health if you think you might have hand dermatitis?

- You'll get support to prevent your condition becoming more serious
 - OH can arrange treatment and, if necessary, arrange for a temporary change in your duties
 - You may avoid having to be signed off sick or taken off working in clinical areas
- By consulting occupational health, you not only help yourself, but help other nurses
 - It's only if nurses consult OH, that the department can get a full picture of how frequently nurses develop hand dermatitis
 - Having a full picture means that occupational health can work to identify and reduce the causes of dermatitis in your workplace



Why go to occupational health if you think you might have hand dermatitis?

- **Some people are concerned that more senior staff may view visiting OH negatively**
 - Senior staff we spoke to said that, actually, they're more likely to view seeking help for hand dermatitis positively
 - Not only does it reduce the possibility that you have to take time off sick, but it is taking responsibility for your own wellbeing and promoting good infection control
 - Consult HR or your union if you feel that you're being unduly pressured not to visit OH by someone you work with



Contacting occupational health

- It might take a little time and effort to get an OH appointment
 - However, it is much better to spend this time now than have to take time away from your clinical work because your hand dermatitis symptoms have become very severe
- You could find the contact details for your occupational health service and save the number to your phone. That way, it's handy if you need it



Checking for dermatitis

- You're more likely to remember to check for symptoms each month if you pick a specific, easy to remember day to do this on.
- Which day will you check on?
 - First Day of the month
 - Last day of the month
 - Pay day

Your plan

If it is the _____ day of the month,
then I will check my hands for demetitis symptoms

Please read your plan three times to yourself. This helps make checking a habit.



Checking for dermatitis

- **What to look for**
 - **Redness, cracking, scaling, flacking**
 - **Blisters, swelling and weeping**
 - **Are the symptoms getting worse?**
- **If you get these symptoms for more than a few days, then contact OH**



Thank you

- You've reached the end of this brochure
- Please keep this document so that you can refer back to it and to your plans
- We will email you in a couple of weeks to check how you're getting on

