NHS
Suffolk and North East Essex

Risk of fire with emollients

The unsafe use of emollients can result in serious or fatal injuries from fire.

When supporting people to use emollients, it is important to be aware of the risks. You might use emollients to help manage dry skin conditions such as eczema or psoriasis.
If people using a paraffin-based emollient product cover it with a dressing or clothing, there is a danger that smoking or using a naked flame could cause these dressings or clothing to catch fire. There may also be reactions between emollients and fibres of dressings, clothing and items such as towels when used to carry out personal care.

Measures to reduce risk:

- all emollients are stored appropriately
- advise people who are using emollients of the risks posed, and to:
  - keep away from open or gas fires or hobs and naked flames, including candles etc. and not to smoke when using these paraffin containing preparations.
  - not to go near anyone smoking or using naked flames
  - change their clothing and bedding regularly because emollients soak into fabric and can become a fire hazard
- In addition, care home settings should ensure:
  - risk assessments are updated to reflect the use and storage of emollients
  - staff should wear disposable gloves when applying emollients

Bedding and clothing should be washed regularly at 60°C to minimise build-up of impregnated paraffin

The risk of fire should be considered when using large quantities of any paraffin-based emollient (e.g. application of 100g or more at once or over a short period of time).

Patients who require large quantities of emollient (100g or more) should use a water- based product (e.g. cream or lotion) rather than a paraffin based one (e.g. ointment) to reduce the fire risk.
The risk is greater when these preparations are applied to large areas of the body, so clothing or dressings become soaked with ointment.

Patients who use nasal cannulae (prongs) for **oxygen administration** can apply a water- based lubricant such as Aquagel to the lips and nose to prevent drying and cracking. **Paraffin based products are not recommended as they can plug air holes and are a fire hazard.**

Emollients suitable for patients using Medical Oxygen	
Paraffin based products are flammable and medical oxygen strongly supports combustion, therefore, to avoid fires patients on Medical Oxygen who require an emollient should not use any paraffin- based products.	
https://www.gov.uk/drug-safety-update/paraffin-based-skin-emollients-on-dressings-or-clothing-fire-risk	
Below is a list of low paraffin content products that are more suitable for prescribing for Oxygen patients	
Aquagel	Prescribe for patients who use nasal cannula for oxygen administration. Can be applied to lips and nose to prevent drying and cracking
ImuDerm Urea Emollient®	Contains Urea 5%, glycerol 5% (*500g pump=£6.79)
Balneum Plus Cream®	Contains Lauromacrogols 3%, urea 5% (*100g=£3.29, 500g pump pack=£14.99)
Epimax paraffin-free Ointment®	Contains Polyoxyethylene (40) hydrogenated castor oil 38% (*500g =£4.99)

*Prices Drug Tariff July 2022

Please note: Whilst the above is a list of products that are safer to use to prevent fires and burns, Suffolk and North East Essex ICB does not recommend the prescribing of emollients on prescription but suggest self-purchase.

Author: Suffolk and North East Essex ICB Medicines Management Team July 2022 Review date July 2024