Fire hazard with paraffin-based skin products on dressings and clothing

Issue
A recent coroner’s investigation into the death of a patient in Leicestershire has re-emphasised the fact that paraffin-based skin products can pose a serious fire risk.

Incident
In a recent case, the Coroner recorded a verdict of accidental death. The deceased had a terminal illness and was bedbound, and was primarily being cared for by his friend, as well as having carers coming into the home. The carers were responsible for assisting with activities of daily living, including applying E45® cream to the skin daily after his wash. E45® had been prescribed by his GP at the request of the district nurses. The deceased was smoking in bed when a fire caught hold, and despite efforts by his friend, as well as the fire crew (who arrived expediently), he was pronounced dead when taken to the Leicester Royal Infirmary.

Following an investigation, the Fire Officer felt that the most likely source of the fire would have been the deceased’s lighter, coupled with the fact that his bedding and clothing were covered in E45 emollient residue, which would have increased the fuel load and acted as an accelerant, increasing the intensity and speed with which the fire took hold.

Learning Points and Actions

- E45® is a paraffin-based skin product available over-the-counter or on prescription.

- Paraffin is highly flammable, and is also present in other commonly-used skin products, including (but not limited to): White Soft Paraffin, White Soft Paraffin plus 50% Liquid Paraffin and Emulsifying ointment.

- When paraffin-based skin products are dispensed or applied, information should be given to patients/carers about the potential fire risks of smoking (or being near to people who are smoking), or exposure to any open flame or other potential cause of ignition during treatment.

- Patients should be advised to regularly change clothing or bedding impregnated with paraffin-based products (preferably on a daily basis) as the paraffin soaks into the fabrics and can potentially be a fire hazard.

- This information should be given on the first occasion that such treatment is prescribed, dispensed or administered by a healthcare professional and a record kept confirming that such advice has been given. A check should be made on subsequent occasions that the advice has been received previously and understood.