Northern Ireland NIAIC Alert

Department of Health
An Roinn Sláinte
Männystrie O Poustie
www.health-ni.gov.uk

Action

Reference:	Issued:	Valid to:
NIA-2020-02	**29th May 2020**	**Until withdrawn**

Risks associated with the use of Alcohol Based Hand Sanitisers

Summary

The wide spread use of Alcohol based hand sanitisers to control cross infection can increase the risk of fire and/or poisoning.

It should be noted that the benefits of using alcohol hand rubs far outweigh the risks mentioned in this notice when adequate control measures are put in place.

Action

Co-ordinated multi-disciplinary risk assessments and control measures are required to manage the risks of fire and poisoning by ingestion arising from the use of alcohol based hand rubs.

1. Staff should be advised to let their hands dry properly and the vapours to disperse after using alcohol based hand sanitisers, particularly before the following actions:

    a. Using an electrical switch or electrical equipment, including electrically powered medical devices,
    b. Using oxygen or medical devices involving oxygen,
    c. Handling a patient or bedding if the patient is receiving oxygen,
    d. Changing an oxygen cylinder or oxygen regulator,
    e. Smoking or being near a naked flame (e.g. match / lighter).

    (***Hands should dry and the alcohol vapour disperse within a few seconds of use provided an excessive amount of sanitiser has not been used, it should also be noted that it may also take longer for the vapour to disperse if the sanitiser is used in conjunction with gloves***)

2. Risk assessments should consider the location of dispensers; taking the storage and disposal of new and used stock, the risks of ingestion and fire/COSHH requirements. The following is given as guidance but should not be considered as an exhaustive list:-

    a. Alcohol based hand sanitisers dispensers should not be placed above or close to light switches and electrical outlets.
    b. Where dispensers are placed in corridors (i.e. outside bedded areas) and are accessible for visitors, the following should apply:
        i. The corridor should NOT be carpeted,
        ii. The corridor should NOT be less than 2 metres wide,
        iii. The corridor should NOT be designated as a protected means of escape,
        iv. Dispensers should be at least 1.2 metres apart,
        v. The maximum container size should be 1 litre,
    c. Clear instructions for use should be displayed at dispenser points if visitors are encouraged to use them.

d. For local storage (e.g. on a ward) a non-combustible cabinet is required to ensure the containment of any spills/leakage and the segregation from other materials. The cabinet should not contain more than 50 litres of highly flammable material in an individual workplace. A 'highly flammables' store will be required for situations where it is necessary to store more than 50 litres (i.e. central bulk storage).
e. Containers and dispenser cartridges should be stored in a cool place away from sources of ignition.
f. Used dispenser cartridges and containers should be treated as controlled waste requiring careful collection and disposal in line with environmental regulations. Rinsing containers with cold water will reduce gel residues along with its fire/environmental risks. Caps should be replaced after rinsing.
g. It is recommended that alcohol based hand sanitisers dispensers are not placed in high-risk wards, where patients could ingest their contents e.g. liver, paediatric and psychiatric wards. Alternatives include the provision of personal dispensers for staff.
h. Patients in other areas who are known or suspected as being at risk should be assessed individually and, if necessary and practical, the risk of ingestion controlled, e.g. by close supervision or temporary removal of dispenser cartridges in the vicinity.

Deadlines for actions

Actions initiated:	1st July 2020
Actions completed:	1st Sept 2020

Problem / background

In order to combat Healthcare Associated Infection (HAI) and cross infection, HSC Trusts and other organisations have increased the use of alcohol-based hand sanitisers (foam, gel and liquid) across all areas. Used in conjunction with conventional soap and water, this is intended to significantly improve the hand cleaning to reduce risk of cross infection. Visitors are also encouraged to use alcohol hand sanitisers before and after contact with patients.

Dispenser for the hand wash may range in size from 50 to 1000 ml; with the smaller containers generally carried as personal issue by staff with larger containers used in wall or bed mounted dispensers.

As alcohol based hand sanitisers are flammable and potentially toxic, there are safety issues associated with their use, including the risk of flash burns, fire/explosion, skin care issues and ingestion. The control of these risks will require a co-ordinated multi-disciplinary approach by risk managers and infection control professionals.

Alcohol based hand sanitisers give off a vapour, which will burn with a colourless flame if ignited. There has been reported evidence of flash burns occurring on the hands of clinical staff immediately after using an alcohol hand rub but the exact ignition cause is not known. Concerns have been raised about the potential for ignition by smokers, static sparks, the use electrical switches, etc. These risks are increased in an oxygen enrich environment i.e. near a patient on oxygen therapy or while handling oxygen equipment**.** It is also noted that alcohol based hand sanitisers may take considerably longer to evaporated when used in conjunction with gloves, hence increasing the risk.

In order to avoid running out of alcohol hand rub, wards may hold reserve stock locally. Local and central (bulk) storage must comply with the fire COSHH regulations regarding the type of cabinet and store respectively.

In addition there has been historical reported incidents of deliberate ingestion of alcohol hand sanitiser by patients with alcohol dependency, this has primarily been where the hand sanitiser was in a liquid form and not suspended in gel or foam, although the later are not totally risk free. Also children and patients in a confused state have also been known to ingest these products.

Suggested onward Distribution

- Governance & Risk Management
- Infection Control Management
- Ward and Departmental managers
- All staff involved with the supply, and distribution of alcohol hand sanitiser
- Health & Safety

Enquires

Enquiries and adverse incident reports in Northern Ireland should be addressed to using the reference NIA-2020-002:

Northern Ireland Adverse Incident Centre
Medical Device and Estates Safety Policy Branch
Safety Strategy Unit, CMO Group
Department of Health
Room D1
Castle Buildings
Stormont Estate
Belfast
BT4 3SQ

Tel: 028 9052 3868
Email: niaic@health-ni.gov.uk
http://www.health-ni.gov.uk/niaic

Reporting adverse incidents in Northern Ireland
Please report directly to NIAIC using the forms on our website.