

## Spill Kit (Decontamination Set)

Decontamination after an accidental spill

Accidental release is possible when:

- A finger is pricked with a contaminated needle
- A leakage occurs
- A glass drug vial breaks

### Decontamination of personnel

- Decontamination of the staff is a priority action that has to be performed immediately.
  - If the skin has been contaminated with some form of CMR medications (carcinogenic, mutagenic or reprotoxic agents), the first approach is to thoroughly clean the skin with large amount of cold water
  - If the eyes have been contaminated, the first approach is to immediately rinse/flush with large amounts of cold water or saline solution for at least 10 minutes. Afterwards, an ophthalmologist must be consulted for further actions.

### Surface decontamination

Basic principles

- The “spill kit” consists of all the basic and essential tools to clean a small leakage from hazardous substances, for example cytotoxic medications.
- After leakage occurs a well-trained person decides whether the spill kit is suitable for decontamination or additional actions are required.

### Procedure for decontamination:

#### 1. Marking contaminated surface

- Contaminated surfaces have to be isolated as soon as possible in order to contain possible toxic distribution and personnel contamination
- Contaminated surfaces can be marked with chalk among other methods.
- It is necessary to mark areas assigned with free entry (for example wards or shipment area) with attention signs.
- If the leakage is a powder form substance, additional steps should be put forward in order to stop or limit the flow of air in the room (for example turn off the air conditioning and close doors and windows)

## **2. Personal protection**

- Overall gown or single use general lab coat
- Disposable shoe covers
- 3M respiratory face mask
- Protective gloves (of adequate thickness) and household gloves
- Protective eyeglasses

## **3. Cleaning**

- Dry substances: the absorbing material used to collect the spilled substance should be initially submerged in water
- Liquid substance: the absorbing material should have high capacity for liquid absorption

### **3.1 Cleaning broken glass**

- Contaminated broken glass has to be entirely collected using the following tools:
  - Scraper/tweezers, garbage shovel and cardboard
  - It is strictly forbidden to use any form of brush
- Additional pair of gloves can be worn.

### **3.2 Cleaning procedure**

- Contaminated surfaces should be cleaned thoroughly
- Best results are achieved when using a two-phase procedure, but check the Safety Data Sheet or Summary of Product Characteristics to see if additional decontaminating agents are required:
  1. 0.05M NaOH in water
  2. 98% isopropanol
- Cleaning at the end with detergents or household cleaning products
- Clean from the cleanest to the dirtiest spot

## **4. Waste disposal**

- Accumulated waste is placed in plastic bags, closed tightly with plastic wire
- Plastic bags are immediately placed in cytostatic disposal containers (that cannot be opened again) and named accordingly to local procedures

Accidents should be documented according to the local procedures. The “Spill kit” equipment must be placed in every room where cytostatic are handled and be reachable for everyone.

The pharmacy department as the central unit has the responsibility for allocating and maintaining the “Spill Kit” equipment.