

Cytotoxic drugs on the loose: alert, prevention, action!

Authors: Célia Morel(1), Sahra Muhammad(1), Aurélie Brian(1), François Bordet(1), Marie-Laure Maëstroni(1)
(1) Centre Hospitalier Sud Francilien, Corbeil-Essonnes, France

Introduction

The handling and administration of injectable cytotoxic drugs is a risk to healthcare professionals, it is therefore important that they know preventive measures, particularly in the event of accidental exposure or spills.

Objectives

To asses hospital professionals’ knowledge regarding the risk of contamination by cytotoxic agents and to prevent occupational hazards for workers involved in the process through various training materials.

Method

- Development of an anonymized theoretical and practical survey to assess the knowledge of professionals involved in the cytotoxic drug circuit
- Implementation of training on the use of the spill management kit for healthcare professionals
- Adaptation of the procedure according to the manufacturer’s data for the decontamination kit
- Creation of a simulation video of a cytotoxic spill
- Development of a prevention leaflet

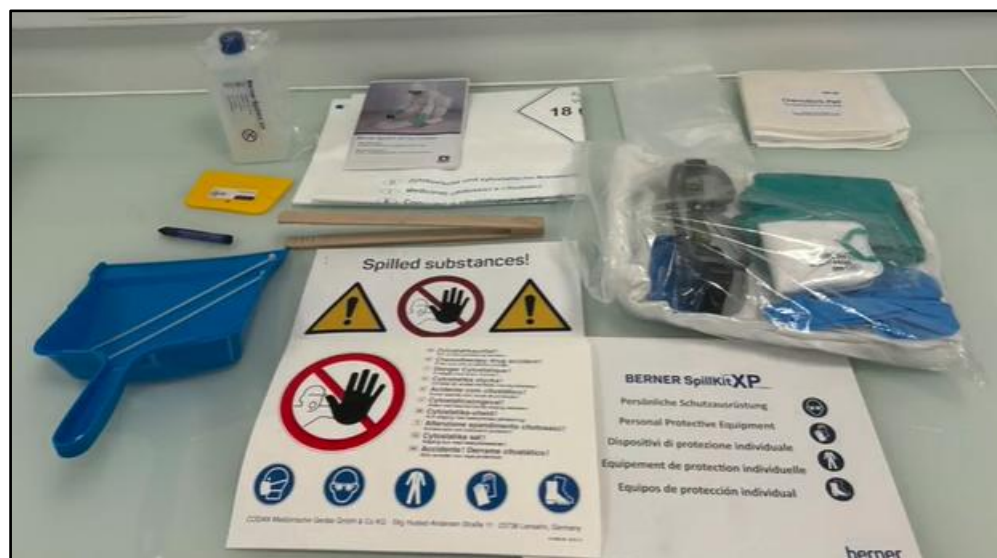


Fig. 1 and 2: Pictures from the training video on the use of the decontamination kit

Results

Survey:

- It consists of 10 questions, and 26 responses were obtained from professionals in various departments: pharmacy, intensive care, hepatology-gastroenterology, oncology, and hematology (inpatient and outpatient).

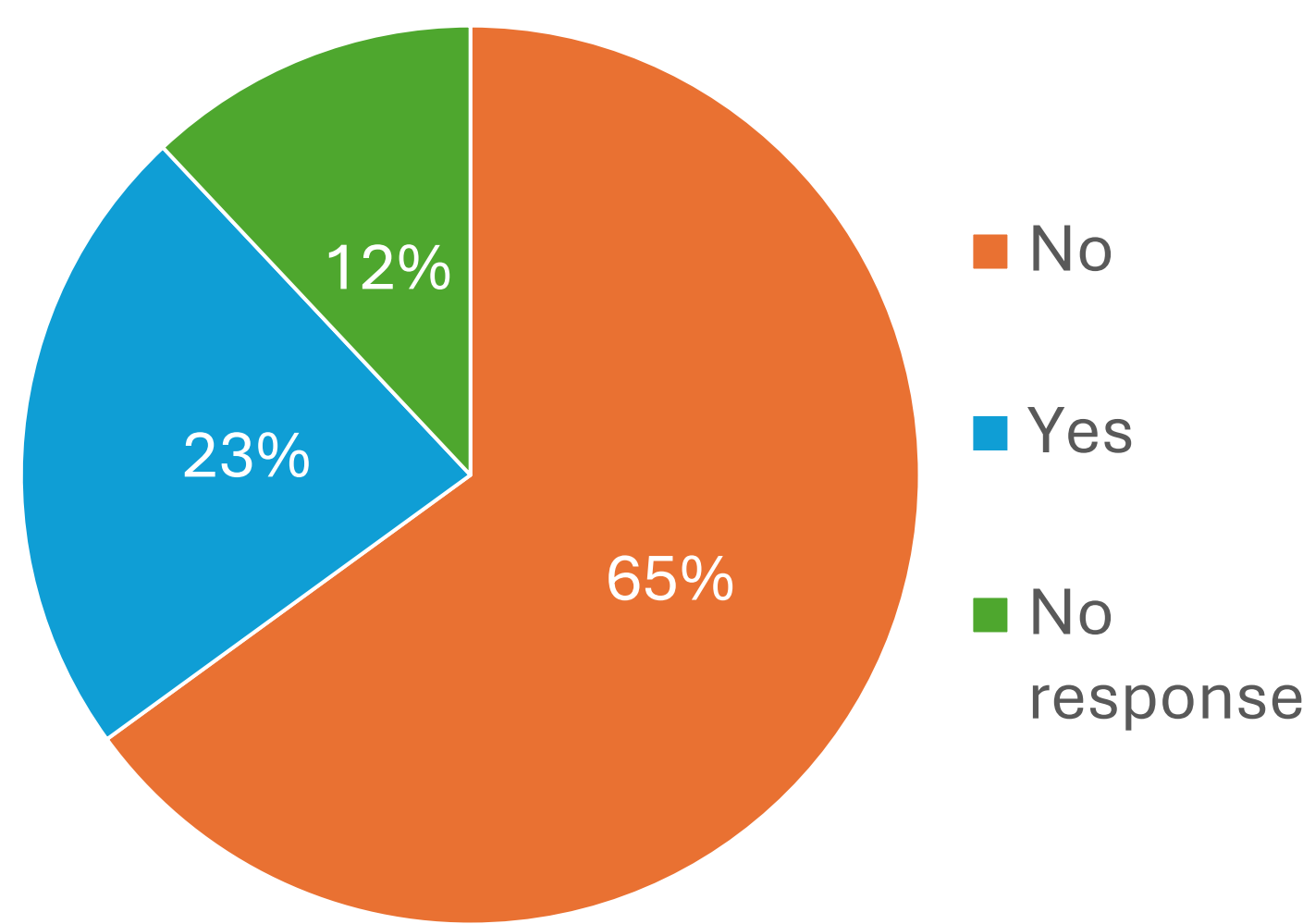


Fig. 3: Responses to the question: « Do you know how to use the hospital’s surface decontamination kit? »

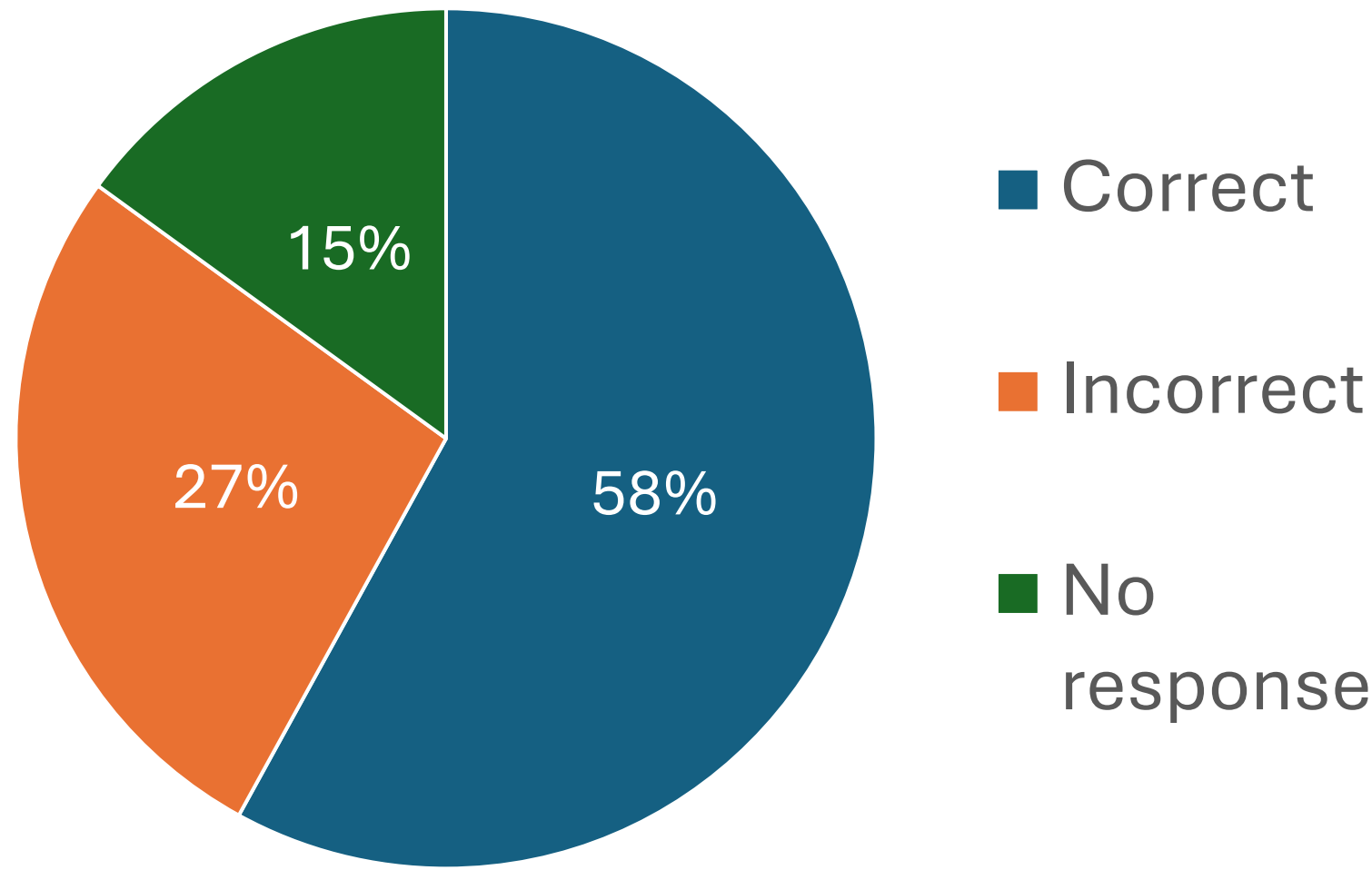


Fig. 4: Responses to the question: « Do you know where to find the procedure to follow in case of direct exposure of healthcare professionals to cytotoxic agents? »

- Two questions addressed accidental exposure of professionals: 10 participants (38%) knew how to act in case of contact between injectable chemotherapy and the skin, and 7 (27%) knew the eye rinsing time in case of contact.

Discussion

- Some professionals reported not knowing how to use the kit, whether in the pharmacy or in clinical departments, highlighting the need for regular and widespread training.
- Most professionals provided at least a partial answer when questioned about specific aspects of spill management, particularly for liquid spills.
- Bringing together the different actors in the circuit during training sessions helped identify existing questions and provided an overview of actual practices.
- The leaflet is mainly intended for departments that do not frequently administer injectable cytotoxic drugs.

Training:

Training on the use of decontamination kit was provided by a laboratory representative. Two one-hour sessions were organized, with 29 professionals participating.

Video:

The video was produced by three pharmacy technicians and a pharmacy resident. One technician simulates the spillage of a bag, while the second assists using the spill management kit by following the steps of the procedure.

Leaflet:

The leaflet includes a reminder of the chemotherapy circuit in the hospital, the personal protective equipment to be worn during administration, and the initial steps to follow in case of spills in the department.



Fig. 5: Cover of the leaflet

Conclusion

The procedure to be followed in the event of surface contamination caused by a cytotoxic spill is generally not known by the teams involved in their handling process. A complementary study is needed to assess the improvement and retention of knowledge.

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