

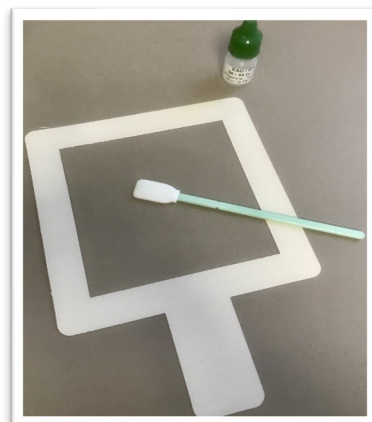
## BACKGROUND

ANSES published a report in 2021 classifying work exposing to cytotoxic active substances as carcinogenic processes themselves.

## OBJECTIVES

We report here the results of our 3rd surface sampling campaign.

## METHODS



Wipe samples were performed in anticancer production units and daily care units (DCU) at two hospital sites (A and B).



3. Quantification of cyclophosphamide and paclitaxel by LC-MS/MS.

Results expressed in ng / cm<sup>2</sup>  
Communicated to healthcare workers

Contamination below 0.100 ng/cm<sup>2</sup> is considered as « safe ». Sessink PJM (2011)

## RESULTS

**109 samples** were carried out : **93% positive** for cyclophosphamide vs **91% positive** for paclitaxel

Decontamination process for industrial vials



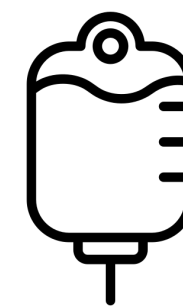
Cyclophosphamide	Paclitaxel
[0,003-0,131]	[NQ-0.146]

Decontamination

[0.003-0.022]	[ND-0.006]
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Effectiveness of the decontamination procedure

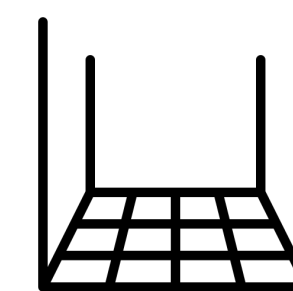
External contamination of chemotherapy bags



Cyclophosphamide	Paclitaxel
[ND-36.860] 2018	×

Significant external contamination, particularly when bags were prepared by the PharmaHelp® machine

Floor cleaning



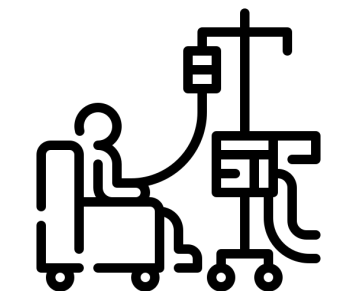
Cyclophosphamide	Paclitaxel
[0.046-5.642]	[0.079-0.518]
external company	

[0,036-3,623]	[0.043-0.346]
Klercide detergent™	

[0.019-0.798]	[0.094-0.351]
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Effectiveness of cleaning mainly on cyclophosphamide

Contamination in the administration areas



Cyclophosphamide	Paclitaxel
[ND-27.320] 2018	×

Cyclophosphamide contamination was reduced. NB: Contamination of the infusion pumps was higher for paclitaxel

## CONCLUSION

During the Covid-19 pandemic, the disinfection procedures have been improved to the benefit of a reduction in surface contamination in the DCU studied.

Our cleaning protocols seem to be **more effective for hydrophilic molecules** considering the results observed for paclitaxel.

→ Need to **develop multi-component analyzes** in our institution to control more and more the risk of occupational exposure

## CONTACT

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