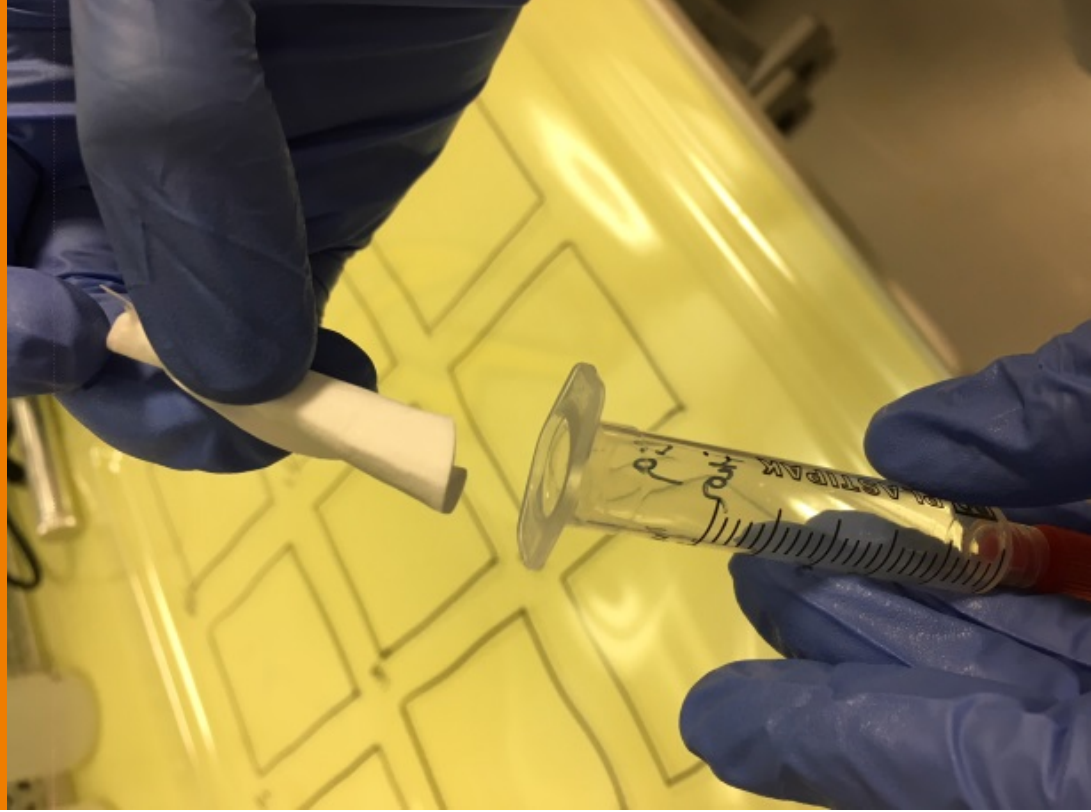
Dr Alexandre ACRAMEL

Novembre 2020

Application of annual monitoring of environmental contamination to limit the risk of occupational exposure to hazardous drugs on two hospital sites



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Introduction

2018
- **Cyclo-CONTA** Project: exhaustive mapping of the environmental contamination with a level of risk

2018-2019
- Corrective measures

2019
- **Cyclo-CONTA** Project: annual monitoring

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APPLICATION OF WIPE SAMPLES TO ASSESS PRACTICES AND LIMIT THE RISK OF OCCUPATIONAL EXPOSURE TO HAZARDOUS DRUGS IN TWO HOSPITALS: FROM VIAL RECEIPT TO DRUG ADMINISTRATION

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21TH EUROPEAN GERPAC CONFERENCE, OCTOBER 3-5 2018, HYÈRES, FRANCE

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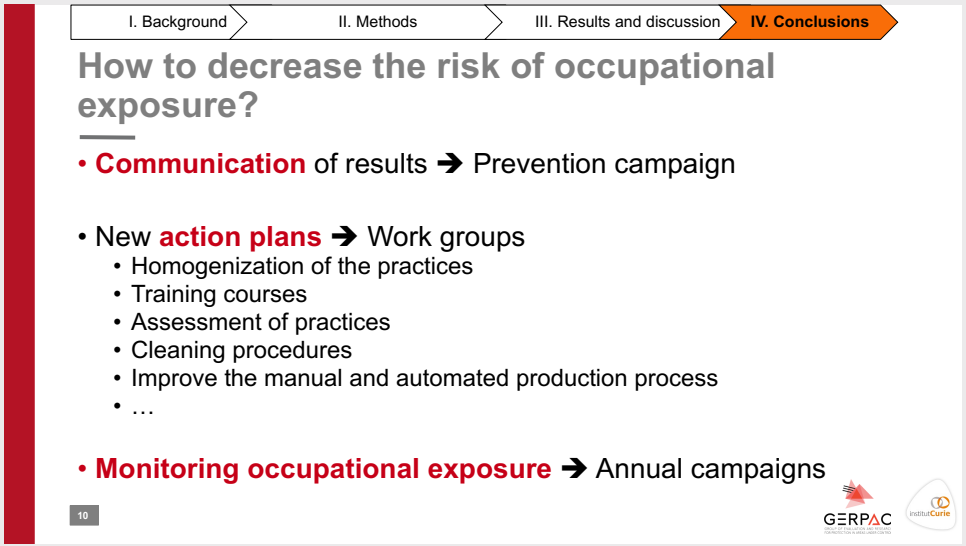
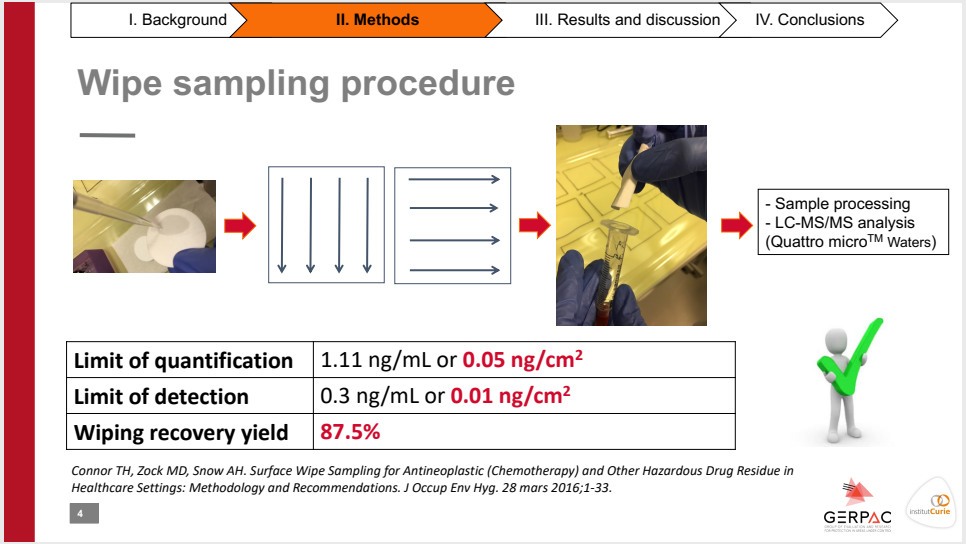


Wipe sampling campaign to (re)assess:

1. Decontamination of manufacturer **vials**
2. External contamination of infusion **bags**
3. **Cross-contamination**
4. Decontamination **procedures**
5. Contamination in **Healthcare departments**



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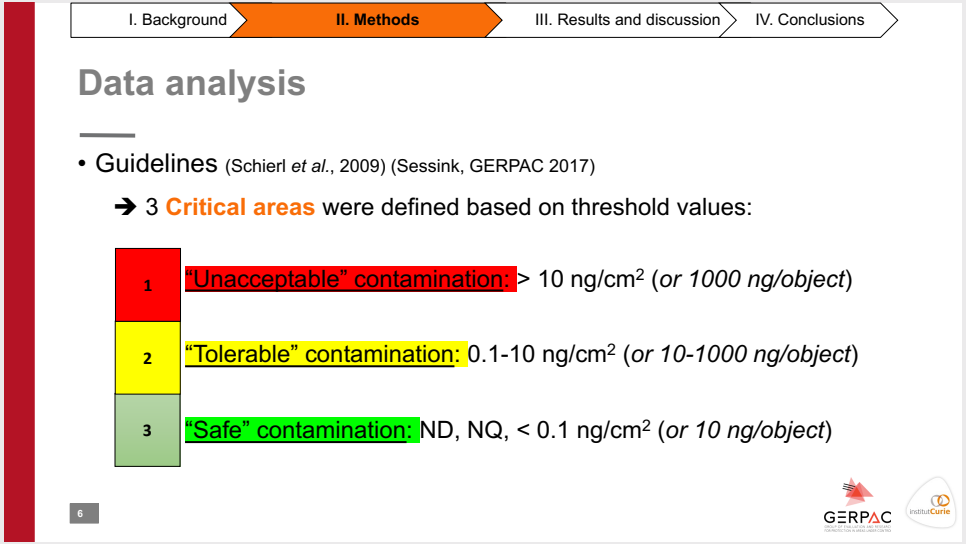

Results : PRODUCTION UNITS (Paris, n_1 = 23 samples)

Corrective measures (2018-2019)	Area / Object	2018	2019
1. *Reassessment of practices around chemical contamination associated with the chemotherapy production activity: application of fluorescein tests* 2. *Update of good handling practices* 3. *Update of manufacturing processes by automated system*	Bags manufactured by automated system (surface and injection site)	279-4239 ng	21-309 ng
	Bags manufactured by manual system (surface and injection site)	ND-404 ng	NQ-20 ng
	PLACEBO bags manufactured by manual system (inside)	-	ND-46 ng
	Gloves	10-155 ng	NQ-15 ng

Results : PRODUCTION UNITS (St-Cloud, n_2 = 27 samples)

Corrective measures (2018-2019)	Area / Object	2018	2019
1. *Update of manufacturer vial decontamination* 2. *Update of decontamination processes*	Cart (reception area)	ND	ND
	Drug vials BEFORE cleaning (*2018 SANDOZ vs. 2019 BAXTER)	NQ-106 ng	NQ-12 ng
	Drug vials AFTER cleaning (*2018 SANDOZ vs. 2019 BAXTER)	8-93 ng	ND
	Medicine cabinet (handle)	NQ	ND
	Isolator BEFORE cleaning (benchtop, shelf, “tubing handle”)	-	76-126 ng
	Isolator AFTER cleaning (benchtop, shelf, “tubing handle”)	NQ-14 ng	14-168 ng
	Isolator BEFORE cleaning (“turnstile”)	-	76 ng
	Isolator AFTER cleaning (“turnstile”)	196 ng	2291 ng
	“Storage isolator” (benchtop)	-	ND
	“Medication picking trolley” (handles)	-	ND
	“Medication picking basket”	-	166 ng
	QC prep analytical control area (benches, handles, hand shower)	10-11 ng	ND
	QC prep analytical control area (carousel)	30 ng	35 ng

Results : HEALTHCARE UNITS (Paris, Daily care unit, n_3 = 30 samples)

Corrective measures (2018-2019)	Area / Object	2018	2019
1. *Audit of good administration practices* 2. *Update of procedures related to the administration of chemotherapy*	"Patient sign" (reception area)	-	ND-NQ
	DECT / Phone	-	ND
	Computers administration area (mouse)	-	ND
	Waste bins in the administration area (metal plinths)	-	ND
	Nursing toilets (floor, toilet seat, sink)	-	ND-NQ
	Patient toilets (floor, toilet seat, sink)	9-197 ng	6-645 ng
	Armchairs in the administration area (backrest)	-	ND-NQ
	Floor (infusion stands)	46-2732 ng	NQ-99 ng
	Floor (infusion stands) AFTER cleaning by an outside company	-	NQ-215 ng

Results : HEALTHCARE UNITS (St-Cloud, n_4 = 26 samples)

Corrective measures (2018-2019)	Area / Object	2018	2019	
Audit of good administration practices	Handles (room)	-	ND-NQ	Daily care unit
	Armchairs in the administration area (armrests)	ND-47 ng	ND	
	Pumps (infusion stands)	ND-30 ng	ND	
	Floor (infusion stands)	ND-18 ng	22 ng	
	Transport trays (storage)	-	ND	Hematology department
	Handles (room)	-	ND-122 ng	
	Armchairs in the administration area (armrests)	-	ND-NQ	
	Pumps (infusion stands)	-	ND-65 ng	
	Floor (infusion stands)	-	ND-21 ng	

Application of annual monitoring of environmental contamination to limit the risk of occupational exposure to hazardous drugs on two hospital sites ?

- ➔ Access the effectiveness of the corrective measures
- ➔ Practices are significantly improving
- ➔ Risk of occupational exposure is under control
- ➔ Progress is still to be made concerning bio-cleaning

Conclusion

Application of annual monitoring of environmental contamination to limit the risk of occupational exposure to hazardous drugs on two hospital sites ?

➔ To maintain exposure control : regular awareness-raising of good practices

➔ Improvement or maintenance of these residual levels will be assessed

➔ Next campaign (2021) with a new tracer (Paclitaxel): **Curie-CONTA** Project

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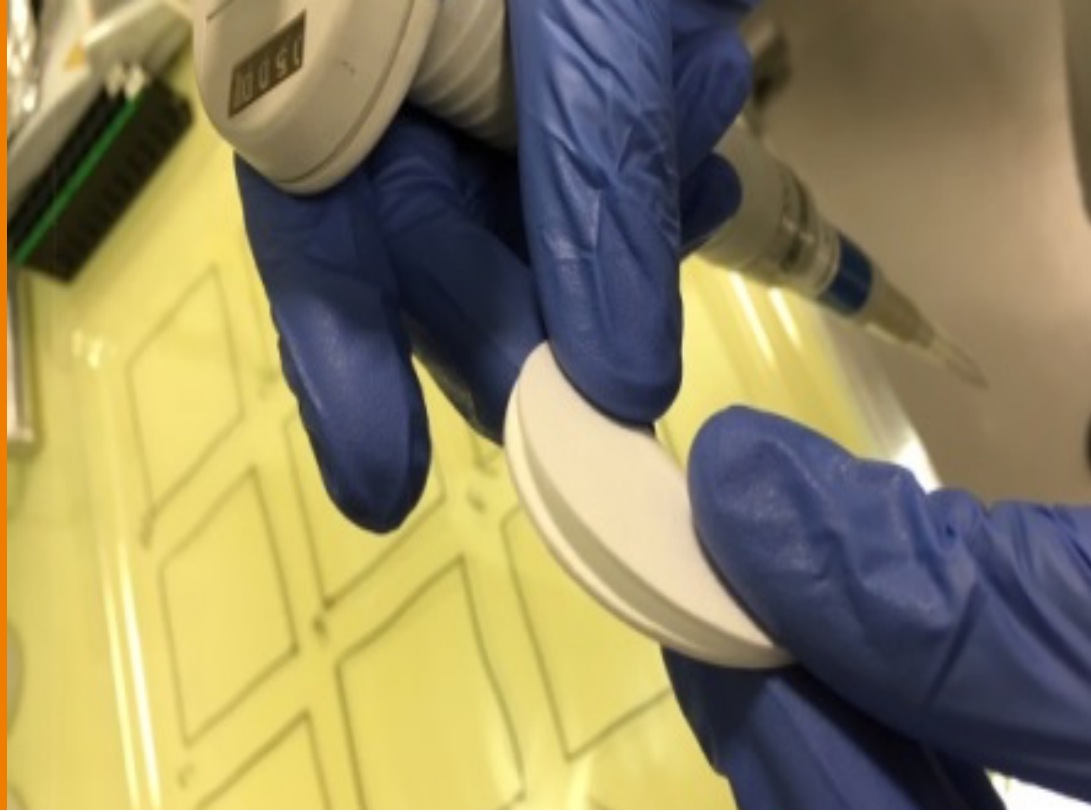
Thank you for your attention!



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