

Trend analysis of microbiological samples within isolators

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INTRODUCTION & OBJECTIVES

Context:

- Installation of new isolators in our Centralized Chemotherapy Reconstitution Unit (CCRU) in summer 2023
- Official release of new Good Preparation Practices (GPP) 2023

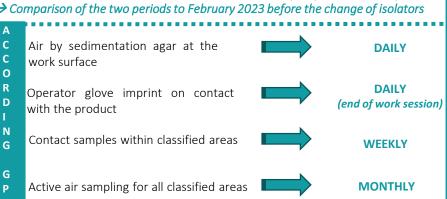
Objective:

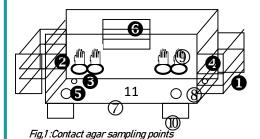
✓ Redefine a frequency of microbiological samples adapted to practice and consistent with recommendations

MATERIEALS & METHODS

2nd part (L) 1st part For 4 weeks: monitoring For 4 weeks (afterwards): adjustment of sampling according to the results of samples according to the GPP recommendations obtained (not predetermined)

→ Comparison of the two periods to February 2023 before the change of isolators





The samples are taken according to the auidelines of the Association for Safety and Economy in Pharmacy (ASPEC) in class A overpressure isolators.

The mapping of risk points has been established with the insulator manufacturer.

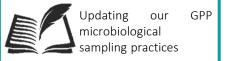
RESULTS CLASS AIR SAMPLE PETRI DISH CONTACT AGAR **GLOVE IMPRINT** cfu/m3 cfu/glove cfu/4hours cfu/plaque <1 <1 Tab. 1: GPP recommended limits for microbiological contamination Sedimentation Contact Gloves 120% 100% 80% 60% 40% 20% NA NA Reference period **GPP** frequency Suitable frequency Fig. 2: results of the samples over the 3 periods

	Reference period	GPP frequency	Suitable frequency
Gloves	X	Daily (end of work session)	Daily (1 glove per day)
Contact	Weekly (2 points)	Weekly (10 points)	Weekly (2 points)
Sedimentation	Weekly	Daily	Daily
Impaction	X	Monthly	Monthly

Tab. 2: results of microbiological samples according to sampling frequencies

- Single positive sample during the "GPP frequency period"
- No positives during the "suitable frequency" period

DISCUSSION & CONCLUSION





Implementation of aerobiocontaminati on inside isolators



Spacing of samples while guaranteeing compliance with class A of the isolators



New collection schedule

- ✓ Aerobiocontamination: monthly
- ✓ Contact agars: 10 critical points of the isolator weekly
- ✓ Gloves: daily on each pair of gloves
- ✓ Sedimentation: daily sampling of ... maximum 4 hours at each station