

Introduction – Objective



- Most of scintigraphy examinations require injection of **radiopharmaceuticals (RP)** prepared with **aseptic conditions** in:
 - ✓ An automated dispenser (AD) ⇒ positron emission tomography radiotracers
 - ✓ A low-energy shielded workstation (LEW) ⇒ low-energy emitters
- Aim of this work: **assess hygiene practices of pharmacy technicians (PT) and electro-radiology technicians (ERT)**

Material and methods

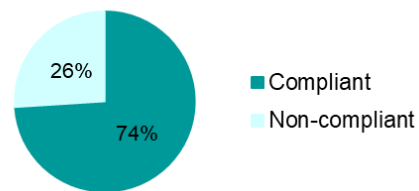
- Analysis of one-year results of surfaces and gloves' microbiological controls ⇒ critical points
- Evaluation grid** drafted from this analysis and hygiene procedures in force
 - ✓ 25 items for PT (working only on LEW)
 - ✓ 45 items for ERT
- Microbiological surfaces and gloves' controls**
- Audit: pharmacy resident evaluated each technician, integrated data into Excel® and analyzed results

Results

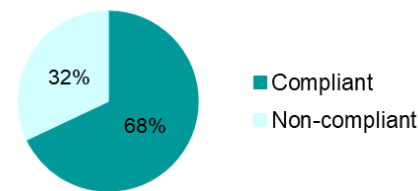
3 months (1st quarter 2020) ⇒ 18/22 technicians evaluated

- Technicians' clothing:** 89% compliant
- LEW:**
 - Non-sterile devices were correctly biodecontaminated at 82%
 - Daily cleaning: all steps were carried out according to existing procedures
- AD:** daily cleaning steps: 93% compliant
- Professionals' knowledge about **cleaning products:** 100% 
- Hand hygiene:** only 17% when entering the unit 
- LEW:**
 - Gloves and surfaces not disinfected before starting activity at 82%
 - Daily cleaning: cleaning from the back to the front not followed at 36%
- AD:** weekly cleaning ⇒ not cleaned the entire interior surface (20%) and not disinfected gloves (80%)
- Cleaning products'** use not uniform
- Microbiological controls: not improved** during audit

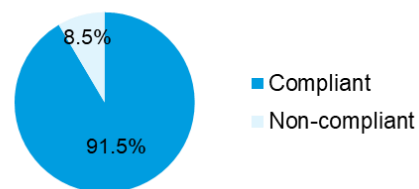
Gloves (1st quarter 2019)



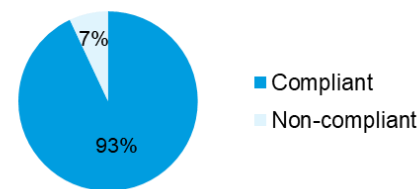
Gloves (1st quarter 2020)



Surfaces (1st quarter 2019)



Surfaces (1st quarter 2020)



- Major microbiological contamination of gloves** (stock renewal not regularly)

Discussion – Conclusion

- Microbiological controls not improved ⇒ audit didn't affect technicians' behavior
- Assessment highlighted:
 - Practices deviances and inhomogeneity**, particularly on cleaning products' use ⇒ cleaning products' use defined (isopropyl alcohol and detergent-disinfectant)
 - Hygiene procedures too complex** ⇒ reviewed to automate and harmonize practices
- Corrective action for gloves ⇒ implement an annually turn-over
- Audit results presentation and new hygiene procedures information to the staff ⇒ continuing professional development
- Pedagogic flyer** on microbiological results will be shown monthly

Example: Presentation of april's microbiological results

