Cases of contamination at the milk-processing and cheese-production factory in the Russian Federation

Elena Boldyreva, DVM, PhD.

## Cheese factory description

- Bryansk region, close to the border with Ukraine and Belarus Republic
- 50 tones of milk/day, quality of milk varies
- Total personnel: 180
- Production of local cheeses: brine brynza (similar to Greek feta cheese), feta, and soft cheeses Adygei, Cecil, Suluguni (Caucasian cheeses)
- Production of mozzarella ("fior di latte", "ciliegine"), pizza cheese (Italian technologies)
- Production of ricotta (Italian technologies)
- Butter



## Contamination and its sources

- ->Moulds, yeasts, E. coli
- Sources:
- <u>1.</u> Sanitary state of production departments and equipment
- Pavement, rusty pipe-lines
- CIP not performed well
- Equipment that isn't cleaned
- Dirty hands
- Non-observance of the rules of product storage
- Technical failures and problems (no electricity!)
- Replacement of rubber cushions and layers in milk pipe-lines (2 euro each) can save thousands of euro!









### 2. Management

Allocation of responsibility

(Many managers but nobody is responsible)

- Poor planning
- Lack of control!
- Non-observance of production technologies
- Technical maintenance of equipment, breakdown prevention
- Optimization
- Very often simple solutions can prevent contamination and save money!

#### <u>3. Manual labor and working conditions</u> Too much manual labor and poor working conditions -> a great impact of human factor





# Thank you for your attention!

Any questions?

boldyreva@mail.ru