**Table 1.** Healthcare, Pharmaceutical and Food Work Environments

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|  | Sampling technique (microbiological parameter) | Benchmark Guidance Value | Microbiological indicator | References |
| **Hospitals** | Dipslide (ACC 30°C/48h) | ≤ 2,5 CFU/cm2 | *Staphylococcus aureus*; MRSA; MSSA | [64] |
|  | Contact plates (ACC 37°C/48h) | ≤ 2,5 CFU/cm2 |  | [65] |
|  | ACC | < 5 CFU/cm2 | *Staphylococcus aureus*; MRSA; *Clostridium difficile*, *Salmonella*; *Aspergillus*Vancomycin-resistant enterococci | [66] |
|  | ATP-bioluminescence | < 100 RLU |  | [65, 64] |
|  | ATP-bioluminescence | < 250 RLU | *Staphylococcus aureus*; MRSA | [56] |
|  | Contact plates (TBC) | From ≤ 5 CFU/plate (operating room and other critical environment) to ≤ 50 CFU/plate (ICU-Intensive Care Unit, neonatology) | *Staphylococcus aureus*; *Aspergillus* spp.; *Pseudomonas* spp.; *Enterobacteria* | [31] |
|  | Contact plates (TBC 37°C) | Low risk area (office) < 5 CFU/cm2Medium risk area (waiting room, lifts, counselling etc.) < 2 CFU/cm2High and very high risk area (ICU, operating room, neonatology, emergency, etc.) < 0,2 CFU/cm2 | *Aspergillus fumigatus* | [37] |
|  | Swabs (ACC 37°C/48h) | < 2,5 CFU/cm2 | MRSA | [56] |
|  | Swabs (ACC 48h) | < 2,5 CFU/cm2 | *S. aureus*; *E. coli*; *P. aeruginosa*; *A. baumannii* | [67] |
| **Ambulances** | Swabs (TBC 37°C/48h) | < 5 CFU/cm2 |  | [68] |
| **Surgery practices** | Swabs (TBC 37°C/72h; Total Fungal Count: TFC 28°C/72h) | 0 CFU/cm2 (acceptable) 1-5 CFU/cm2 (doubtful) > 5 CFU/cm2 (not acceptable) | Enterobacteria; *P. aeruginosa* | [69] |
| **Dental practices** | Contact plates (TBC 36°C/48h) | ≤ 0,64 CFU/cm2 (acceptable) 1,48 CFU/cm2 (alert) |  | [70] |
|  | Swabs (TBC 36°C/48h) | ≤ 1 CFU/cm2 |  | [71] |
| **Pharmaceutical Clean rooms** | RODAC plates (TBC 30-35°C/48h, than 20-25°C/72h ) | Class A1: < 1 CFU/plate (walls and benches) Class B1 and B2: < 5 CFU/plate (walls); < 10 CFU/plate (benches) Class C: < 25 CFU/plate (walls); < 50 CFU/plate (floor) Class D1 and D2: < 50 CFU/plate (floor and walls) | *Staphylococcus* spp.; *Micrococcus* spp.; *Bacillus* spp.; *Candida* spp. | [36] |
|  | Swabs | Class A2: < 1 CFU/swab |  |  |
|  | Contact plates | Surfaces: from < 1 CFU/plate (sterility level A) to < 50 CFU/plate (sterility level D) Gloves: from < 1 CFU/glove (zone A) to < 5 CFU/glove (zone B) |  | [30] |
| **Pharmaceuticals** | Contact plates (TBC 37°C/24h, than RT/48h) | From < 0,2 CFU/cm2 (clean rooms) to < 5 CFU/cm2 (offices, stairs, etc.) | *Staphylococcus* spp.; *Micrococcus* spp.; *Bacillus* spp.; *Candida* spp. | [37] |
| **Food preparation areas (surfaces and tools)** | Contact plates (25,8 cm2 20-25°C/48h) | < 150 CFU/plate | *Pseudomonas fluorescens*;*Escherichia coli*; *S. aureus* | [72] |
|  | Contact plates (TBC) | ≤ 10 CFU/cm2 (after sanitization) | *Salmonella* spp*.; Listeria monocytogenes*; Total coliforms ≤ 1 CFU/cm2 | [73, 74] |
|  | Contact plates (TBC) | Satisfactory sanitization:TBC ≤ 10 CFU/cm2 | Total coliforms ≤ 1 CFU/cm2Absence *Salmonella* and*Listeria monocytogenes* | [75] |
|  | Contact plates (TBC 30°C/48h; TFC 25°C/120h) | 0 ≤ CFU/plate ≤ 2 (very good) 3 ≤ CFU/plate ≤ 9 (good)10 ≤ CFU/plate ≤ 29 (satisfactory) | Coliforms; *S. aureus* | [36, 76] |
|  | Swabs (TBC) | 0 ≤ CFU/100 cm2 ≤ 8 (very good) 12 ≤ CFU/100 cm2 ≤ 36 (good) 37 ≤ CFU/100 cm2 ≤ 116 (satisfactory) | Coliforms; *S. aureus* | [36, 76] |
| **Catering** | Contact plates (TBC) | ≤ 4 CFU/cm2 | Total microorganisms, coliforms,*S. aureus*, *E. coli*, *Salmonella* spp. and *Listeria monocytogenes* | [77] |
| **Restaurants** | ATP-bioluminescence | 50 RLU | *Escherichia coli* | [78] |
|  | Swabs (TBC 30°C/24-48h) | 80 CFU/cm2 |  |  |
| **Butcheries and supermarkets** | Contact plates (TBC) | ≤ 4 CFU/cm2 | Total coliforms < 1 CFU/cm2; *E. coli* | [79] |
| **Area****microbiologically****checked****(cooked dishes)** | Contact plates (TBC 37°C/24hand room temperature/48h) | Area 1 < 5 CFU/cm2Area 2 < 2 CFU/cm2Area 3 < 0,2 CFU/cm2Area 4 < 0,2 CFU/cm2 | Coliforms and *E.coli* | [37] |

**Legends - TBC: Total Bacterial Count; ACC: Aerobic Colony Count; RLU: Relative Light Units**