**Table I: Mean CFU on 90mm plates and CFU/m3 for settle plate-sampler in empty and in-use operating rooms of National Hospital, Sri Lanka**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | | **Mean CFU/ CFU per m3** | |
| **Method** | | | **CV** | **LAF** |
|  |  | No. of CFU on 90mm plate- Sampler | 68.44 | 2.50 |
|  | **Empty OR** | No. of CFU on 90mm plate- Settle plate | 2.65 | 0.83 |
|  |  | Probable no. of CFU/m3 of air- Sampler | 79.00 | 4.38 |
|  |  | Probable no. of CFU/m3 of air- Settle plate | 141.82 | 43.00 |
|  |  | No. of CFU on 90mm plate- Sampler | 123.56 | 16.06 |
|  | **In-use OR** | No. of CFU on 90mm plate- Settle plate | 5.09 | 1.43 |
|  |  | Probable no. of CFU/m3 of air- Sampler | 157.94 | 19.19 |
|  |  | Probable no. of CFU/m3 of air- Settle plate | 265.09 | 76.21 |

**Table II: Differences in air contamination in two ORs while empty and in-use as measured by the two methods simultaneously**

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| --- | --- | --- | --- | --- | --- |
| **Sampling method** | **Operating room** | **Mean No. of CFU/plate** | **Std. deviation** | **Std. Error Mean** |  |
| **Settle plate** | CV (empty)  LAF (empty) | 2.650  0.825 | 2.7271  0.5651 | 0.6818  0.1413 | t=2.621  df =30  **p = 0.014** |
| CV (in-use)  LAF (in-use) | 5.088  1.425 | 3.8623  0.7335 | 0.9656  0.1834 | t= 3.726  df = 30  **p = 0.001** |
| **Commercial Sampler** | CV (empty)  LAF (empty) | 68.44  2.50 | 25.266  1.549 | 6.317  .387 | t=10.41  df = 30  **p = <0.001** |
| CV (in-use)  LAF (in-use) | 123.56  16.06 | 42.593  22.338 | 10.648  5.585 | t= 8.941  df = 30  **p = <0.001** |

**Table III: Comparison of air contamination in the two ORs while empty and in-use as measured by commercial sampler**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Operating room** | **Mean CFU/plate** | **Std. Error of Mean** | **Std. Deviation** | **Paired samples test (paired t test)** |
| CV (empty)  CV (in-use) | 68.44  123.56 | 6.32  10.65 | 25.27  42.59 | T= -5.284  Df=15  Sig. (2 tailed) = 0.000 |
| LAF (empty)  LAF (in-use) | 2.50  16.06 | .39  5.58 | 1.55  22.34 | T= -2.452  Df=15  Sig. (2 tailed) =0.027 |