**Table 5. Vaccine wastage comparing rural and urban health districts**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Vaccines1** | **2016** | | | | | | | | **2017** | | | | | | | |
| **Urban** | | | **Rural** | | | **χ22** | **p value** | **Urban** | | | **Rural** | | | **χ2** | **p value** |
| **Children vaccinated** | **Doses used** | **Wastage** | **Children vaccinated** | **Doses used** | **Wastage** | **Children vaccinated** | **Doses used** | **Wastage** | **Children vaccinated** | **Doses used** | **Wastage** |
| **BCG** | 76912 | 108017 | 28.80% | 11129 | 20216 | 44.95% | 410.93 | <0.0001 | 74408 | 107754 | 30.95% | 10548 | 19138 | 44.88% | 300.01 | <0.0001 |
| **OPV** | 298562 | 307052 | 2.77% | 48521 | 53186 | 8.77% | 88.29 | <0.0001 | 285696 | 298535 | 4.30% | 41880 | 45698 | 8.35% | 35.58 | <0.0001 |
| **IPV** | 72580 | 86051 | 15.65% | 11616 | 16278 | 28.64% | 161.7 | <0.0001 | 64471 | 77052 | 16.33% | 8989 | 12569 | 28.48% | 112.35 | <0.0001 |
| **PENTA** | 221968 | 225482 | 1.56% | 37309 | 40065 | 6.88% | 50.81 | <0.0001 | 209745 | 218045 | 3.81% | 31417 | 35662 | 11.90% | 111.64 | <0.0001 |
| **PCV** | 221762 | 214541 | -3.37% | 37317 | 36601 | -1.96% | 2.97 | 0.0851\* | 211082 | 202505 | -4.24% | 31560 | 30543 | -3.33% | 1.02 | 0.3127\* |
| **ROTA** | 144832 | 141803 | -2.14% | 24003 | 23423 | -2.48% | 0.11 | 0.7411\* | 140414 | 138329 | -1.51% | 21216 | 21407 | 0.89% | 5.26 | 0.0215 |
| **MR** | 70388 | 84489 | 16.69% | 11254 | 15563 | 27.69% | 111.85 | <0.0001 | 57970 | 70639 | 17.93% | 8563 | 12351 | 30.67% | 124.12 | <0.0001 |
| **YF** | 70287 | 83874 | 16.20% | 11236 | 15515 | 27.58% | 118.6 | <0.0001 | 63354 | 76170 | 16.83% | 9088 | 12974 | 29.95% | 136.62 | <0.0001 |
| **Total** | 1177291 | 1251309 | 5.92% | 192385 | 220847 | 12.89% | 521.3 | <0.0001 | 1107140 | 1189029 | 6.89% | 163261 | 190342 | 14.23% | 513.93 | <0.0001 |

1 Vaccines: BCG: Bacillus Calmette-Guérin, OPV: Oral Polio Vaccine, IPV: Inactivated Polio Vaccine, DPT-HepB-Hib (pentavalent vaccine): Diphtheria, Pertussis, Tetanus, Hepatitis B and Haemophilus influenza type b (Hib), PCV: Pneumococcal Conjugate Vaccine (PCV), ROTA: Rotavirus Vaccine, MR: Measles and Rubella, YF: Yellow Fever

2χ2 refers to the chi-square test which brings out statistical differences between number of children vaccinated and doses of vaccines used between urban and rural setting.

\*Statistically insignificant