**Table 6. Vaccine wastage rates comparing dry and rainy seasons.**

|  |  |  |
| --- | --- | --- |
| **Vaccine1** | **2016** | **2017** |
| **Dry season**  | **Rainy season** | **χ22** | **p value** | **Dry season** | **Rainy season** | **χ22** | **p value** |
| **Children vaccinated** | **Doses used**  | **Wastage** | **Children vaccinated** | **Doses used**  | **Wastage** |  |  | **Children vaccinated** | **Doses used**  | **Wastage** | **Children vaccinated** | **Doses used**  | **Wastage** |  |  |
| **BCG** | 46528 | 65347 | 28.80% | 41513 | 62886 | 33.99% | 74.48 | <0.0001 | 46621 | 72830 | 35.99% | 38335 | 54062 | 29.09% | 131.16 | <0.0001 |
| **OPV** | 169175 | 177408 | 4.64% | 177908 | 182830 | 2.69% | 18.05 | <0.0001 | 157827 | 174001 | 9.30% | 169749 | 170232 | 0.28% | 376.18 | <0.0001 |
| **IPV** | 39058 | 48331 | 19.19% | 45138 | 53998 | 16.41% | 13.11 | 0.0003 | 30332 | 40522 | 25.15% | 43128 | 49099 | 12.16% | 252.87 | <0.0001 |
| **DPT-HepB-Hib** | 123095 | 126904 | 3.00% | 136182 | 138643 | 1.78% | 5.15 | 0.0232 | 111558 | 122948 | 9.26% | 129604 | 130759 | 0.88% | 240.39 | <0.0001 |
| **PCV** | 122782 | 119434 | -2.80% | 136297 | 131708 | -3.48% | 1.38 | 0.2402\* | 111502 | 109070 | -2.23% | 131140 | 123978 | -5.78% | 34.36 | <0.0001 |
| **Rotavirus vaccine** | 80297 | 78437 | -2.37% | 88538 | 86789 | -2.02% | 0.25 | 0.6175\* | 75031 | 74839 | -0.26% | 86599 | 84897 | -2.00% | 5.96 | 0.0147 |
| **MR** | 42743 | 51316 | 16.71% | 38899 | 48736 | 20.18% | 20.37 | <0.0001 | 37778 | 49033 | 22.95% | 28755 | 33957 | 15.32% | 80.28 | <0.0001 |
| **YF** | 42836 | 51320 | 16.53% | 38687 | 48069 | 19.52% | 14.79 | <0.0001 | 40115 | 49832 | 19.50% | 32327 | 39312 | 17.77% | 4.45 | 0.0349 |
| **Total** | 666514 | 718497 | 7.23% | 703162 | 753659 | 6.70% | 5.8505 | 0.01557 | 610764 | 693075 | 11.88% | 659637 | 686296 | 3.88% | 1245 | <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), 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