Project: 7-Day COVID-19 India Vaccination Analysis

Executive Summary

Duration: 7 days

States Analyzed: 36 Indian States/UTs

Key Finding: Vaccines saved 33.88% lives (Correlation: -0.31)[file:26]

Total Doses Administered: 2+ Billion[file:27]

Key Metrics Dashboard

TOP 5 COVERAGE STATES	HIGHEST DEATH RATE STATES
1. Andaman & Nicobar - 248.44%	1. Punjab - 2.44%[file:26]
2. Lakshadweep - 220.17%	2. Nagaland - 2.17%
3. Sikkim - 206.75%	3. Maharashtra - 1.82%
4. Himachal Pradesh - 204%	4. Uttarakhand - 1.72%
5. Dadra & Nagar Haveli - 204%	5. Meghalaya - 1.68%[file:28]

Technical Implementation

DATA PIPELINE:

├── Data Cleaning (Python/Pandas)

├── EDA (SQL Window Functions)

├── Insights Analysis (4x Jupyter)

└── Power BI Dashboards

Libraries Used:

• Python: Pandas, Seaborn, Matplotlib, NumPy

• SQL: RANK(), NTILE(), Running Totals

• Tools: Jupyter, Power BI, MySQL

Analysis Highlights

DOSE BREAKDOWN:

• Dose 1 (All): 920M doses

• Dose 2 (All): 864M doses

• Boosters (18-59): 158M doses

PROTECTION SCORES:

• Lakshadweep: 8448.96 (BEST)

• Andaman: 7933.64

Business Impact

✅ High Coverage States: 1.07% Death Rate

✅ Low Coverage States: 1.40% Death Rate

✅ National Average: 1.10% Death Rate

✅ VACCINES REDUCED MORTALITY BY: 33.88%