

How We'll Work

Pause

Align

Decide

Next Step

MMSC Case study – Reducing Vaccine Wastage

By the end of this session, you will be able to:

- Identify what type of wastage is predominant in your state and where in the supply chain these occur
- Identify major causes of vaccine wastage in your context and explain how Zipline's small-lot, high-frequency deliveries can help reduce it.
- Identify one practical contribution you can make within your role to reduce wastage.

Refer to page 93 in your Team Member Workbook

A

Pre-Read: Background & Applied Example



- **Context:**

The resources offer insights into current best practices for vaccine wastage management, aligning with WHO standards. They also document Zipline's intervention, which demonstrated significant system benefits



- **Your Task:**

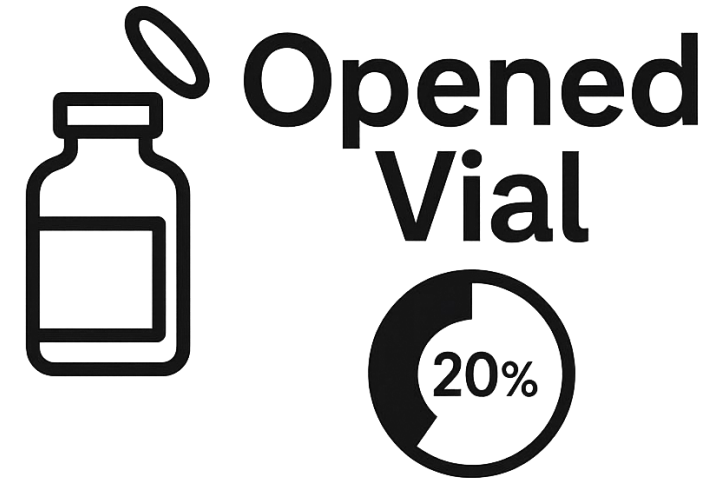
- Read the article [Monitoring Vaccine Wastage at Country Level: Guidelines for Programme Managers](#), paying close attention to the wastage types and influencing factors (logistics, practice)
- Read [Replicable Impact of On-Demand Supply for Improved Vaccination Outcomes](#) for tips on using on-demand supply to reduce wastage; consider which of these you could apply.

Refer to pages 84-90 in your Team Member Workbook

B

Theory: Wastage & Where It Happens

- **Types?**
 - Open-vial
 - Closed-vial
- **Where It Occurs?**
 - **Service Point**
 - Vaccine Usage Rate (VUR) = $(\text{doses administered} \div \text{doses opened}) \times 100$
 - Wastage Rate (WR) = $100 - \text{VUR}$
- **Stores**
 - Track **closed-vial losses** using receipts/physical counts



28-day vs 6-hour rule (MDVP)

B

Why Small-Lot, High-Frequency (Zipline) Works

PROBLEM

Open-vial wastage of multidose vial vaccines

MECHANISM

small lots = open-vial discard ↓
frequent drops = expiries & stock-outs ↓

EFFECT

smaller lots = fewer leftovers
shorter dwell time in facilities = lower expiry
frequent top-ups = fewer stock-outs

C

Application

Brainstorming on Vaccine Wastage Solutions

Demonstrate the use of system-level thinking to address recurring causes of vaccine wastage.

Group Exercise

Group Activity: As a group, discuss and answer the following questions:

1. What are the top three causes of vaccine wastage in your state, and at which point in the supply chain do they occur?
2. How could small-lot, high-frequency deliveries (including Zipline where applicable) address at least one wastage driver you listed?
3. What is one contribution you can make personally to help reduce vaccine wastage in your role?

Plenary Report: Nominate a group member to summarize and share out the outcome of your discussions.

Refer to pages 84-90 and 94 in your Team Member Workbook