

Measles containing vaccines indicator

Logistics (feasibility)

Cold chain volume required per vaccine dose (in cm3)

Cold chain volume required varies by product and presentation:

Measles 1-dose presentations: 21.1 cm³/ dose

5-dose presentations: 2.67-4.22 cm³/ dose

10-dose presentations: 1.78-3.14 cm³/dose

MR 1-dose presentations: 14.09 – 21.09 for vials and 7.8 - 12.528 for ampoules (in secondary packaging).

MR 5-dose presentations:

2.67 – 4.218 for vials and 3.25 – 5.481 for ampoules (in secondary packaging)

MR 10-dose presentations:

1.78 – 2.109 for vials and 2.12 – 3.1424 for ampoules (in secondary packaging)

MMR 1-dose presentations:

9.29 – 21.09 for vials and 12.528 – 20.23 for ampoules (in secondary packaging).

MMR 5-dose presentations:

4.218 for vials and 5.481 for ampoule (in secondary packaging).

MMR 10-dose presentations:

2.109 for vials and 3.1424 for ampoule (in secondary packaging)¹

For specific product characteristics see the comparison table.²

Sources

1.

World Health Organization. WHO Prequalification of Vaccines database: Prequalified vaccines. Geneva: World Health Organization; 2026. (
<https://extranet.who.int/prequal/vaccines/prequalified-vaccines>, accessed 04 August 2026).

2.

Detailed measles-containing [vaccines](#)