## **MMR** explainer

## How was the estimate of 3.4 million children, who were not fully vaccinated against measles, derived?

This document details how the estimated figure of 3.4 million children, who were not fully vaccinated against measles, was derived. It should be noted that this figure was an operational estimate, generated during the planning phase of the MMR catch up campaign, which aimed to reach the maximum number of children to receive a catch-up vaccination. This estimate is subject to change as children move in and out of the eligible cohort.

Based on person-level MMR vaccination data held by NHS England a total of **2.56m** (2,561,120) children aged 6 to 16 years were identified as still requiring one or two doses of the MMR vaccine at the point the data was extracted in July 2023.

Based on the same data source, of those children aged 1 to 5 years, **366,285** were identified as requiring both MMR doses, and of those children aged 3 to 5 years, **406,278** were identified as still needing their second MMR dose as of July 2023. Note that children aged under 3 years were excluded from the estimate of those requiring second MMR doses, as these are only offered once children turn 3 years and 4 months.

Finally, the unregistered population of **84,684** children aged 1 to 5 years sourced from NHS England's master patient list at the time of campaign planning in July 2023, was added, as there was a local focus to invite all children aged 1 to 5 to have their MMR vaccinations including those known not to have been registered with a GP practice at the time.

Adding these figures together, resulted in an estimate of up to 3.4 million children aged 1 to 16 who were not fully vaccinated when planning for the MMR catch up campaign took place in July 2023. This estimate will likely differ over time due to the operational nature of the MMR vaccination data and differences in eligibility based on a child's age at different points in time.