VITAMIN A SUPPLEMENTATION

A STATISTICAL SNAPSHOT

Harnessing the power of two life giving drops

February 2016

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Acknowledgements

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Vitamin A supplementation: A statistical snapshot.
Harnessing the power of two life giving drops.

February 2016

For the latest data, please visit <http://data.unicef.org/nutrition/vitamin-a.html>

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VITAMIN A SUPPLEMENTATION

A STATISTICAL SNAPSHOT, February 2016

Good things come in small packages

Vitamin A supplements have the power to save a child's life. UNICEF and its partners are working to make this happen.

UNICEF – supported vitamin A supplementation programmes have been reaching children aged 6 to 59 months in priority countries for nearly two decades. Vitamin A supplementation helps maintain strong immune systems. It reduces the incidence of diarrhoea and measles in children and prevents blindness and hearing loss. Most importantly, vitamin A supplements can improve a child's chance of survival by 12 to 24 per cent.

No child needs to suffer the consequences of vitamin A deficiency. Supplementation is a safe, cost-effective, and equitable way of reaching the most vulnerable children. UNICEF and WHO recommend that children receive two high-dose vitamin A supplements per year, spaced about 4 to 6 months apart, in places where under-five mortality is high or deficiency is a public health problem. Each high-dose supplement costs just 2 cents, and when given twice a year, can ensure a child is fully protected from the consequences of vitamin A deficiency.

UNICEF supports national–level vitamin A supplementation programmes in over 80 priority countries as a critical child survival intervention. Other strategies for delivering vitamin A – such as food fortification and improving dietary diversity – are ongoing and essential to ending vitamin A deficiency over the long-term. But until such programmes are sustained at scale, vitamin A supplementation programmes are crucial to ensuring child survival today.

While universal coverage (100 per cent) remains the ultimate goal, 'effective coverage' (≥80 per cent) is the threshold needed to improve child survival[1]. Supplementation programmes have made notable progress towards the goal of effective two-dose coverage with UNICEF's leadership and the support of partners, including Helen Keller International and the Micronutrient Initiative, and with long-term financing from the Government of Canada. In 2000, only five countries in sub-Saharan Africa had effective two-dose coverage, but by 2014, this number had more than tripled, to 17 countries in that region.

Despite these gains, there is an urgent need to make further progress in the sub-Saharan Africa region, where countries still face some of the highest rates of under-five mortality in the world. To improve survival rates, we need to better target and monitor the most vulnerable children and systematically identify and address the barriers to reaching them.

We know what it takes to make this happen. We need consistent planning, funding and political commitment. The mode of delivery of vitamin A supplements is also critical. For years, many countries successfully delivered vitamin A supplements as part of polio immunization campaigns. But as these campaigns phase-out, many countries need a transition strategy to ensure that children continue receiving life-saving interventions such as vitamin A supplementation, especially in communities with poor access to routine health services.

In settings plagued by fragility and weak routine health systems, Child Health Events can help to ensure that all children, especially the most vulnerable, continue to have access to interventions. These biannual events deliver vitamin A supplements as part of a locally-tailored package of interventions, such as immunization and deworming. And the events themselves must be integrated into the health system, included in long-term planning, and adapted to the needs of each country, including the strength of the health system.

Child Health Events provide the best hope for achieving effective coverage right now. They work because they target and reach vulnerable communities, especially where routine health systems are weak and under-five mortality rates are high. Put simply, they are key to ensuring that every child gets his or her two drops of life.

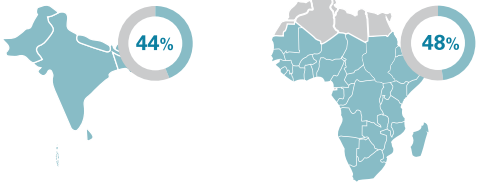
[1] Evidence suggests an impact on child survival at even 70 per cent; however, a more conservative 80 per cent threshold is used in this report.

Vitamin A supplementation for child survival

The problem

1 in 3

Nearly one in three – or 29 per cent – of children aged 6 to 59 months were vitamin A deficient in 2013.



The highest rates of vitamin A deficiency are found in South Asia and sub-Saharan Africa, where nearly half of children aged 6-59 months are affected.

disability

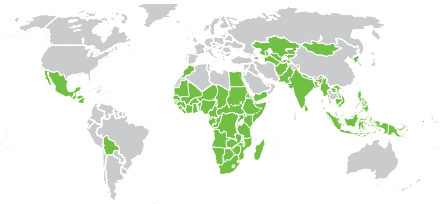
disease and death

Vitamin A deficiency can lead to blindness and hearing loss. It makes children more susceptible to illnesses such as diarrhoea. Most importantly it contributes to child mortality.

The solution

2 high-dose
vitamin A supplements each year

High-dose supplementation remains the principal strategy for addressing mortality related to vitamin A deficiency among children aged 6-59 months.



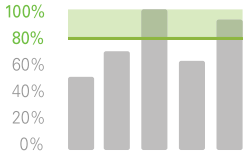
82
priority countries in 2014

UNICEF and partners supported national vitamin A supplementation programmes in 82 priority countries in 2014. The majority were in sub-Saharan Africa and South Asia.

12% - 24%

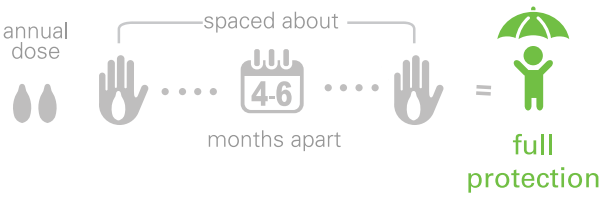
High-dose vitamin A supplementation can reduce all-cause mortality by 12 to 24 per cent and cases of diarrhoea by 15 per cent.

Programme goals



≥ 80%
effective coverage

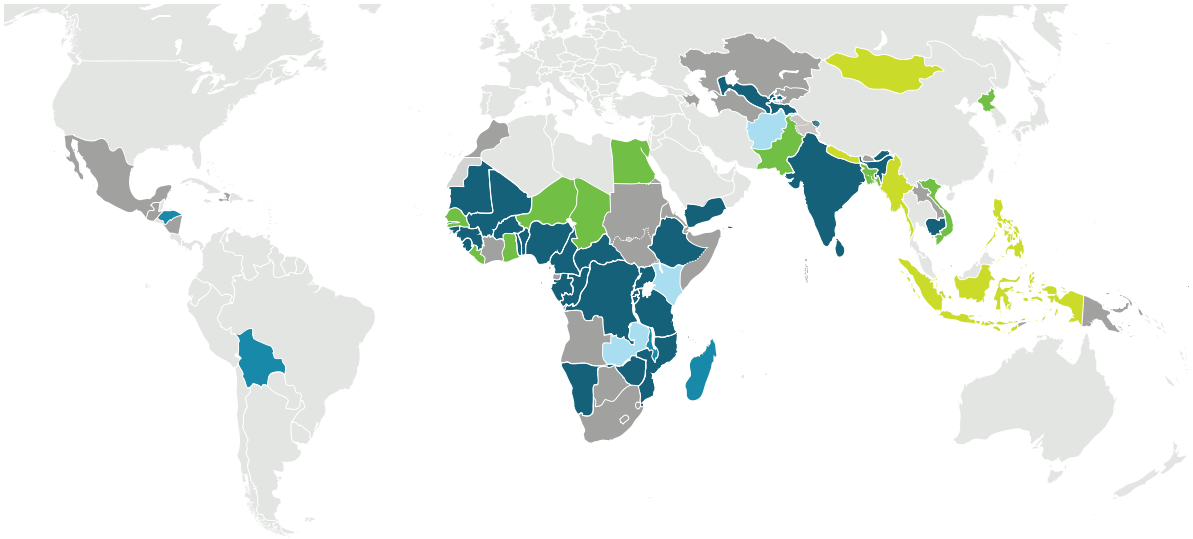
While universal coverage (100 per cent) remains the ultimate goal and is needed to ensure equity, effective coverage (≥ 80 per cent) is the recommended threshold to improve child survival.



To benefit from reductions in morbidity and mortality, children must be fully protected each year.

With UNICEF's support there has been a dramatic improvement in full protection since 2000.

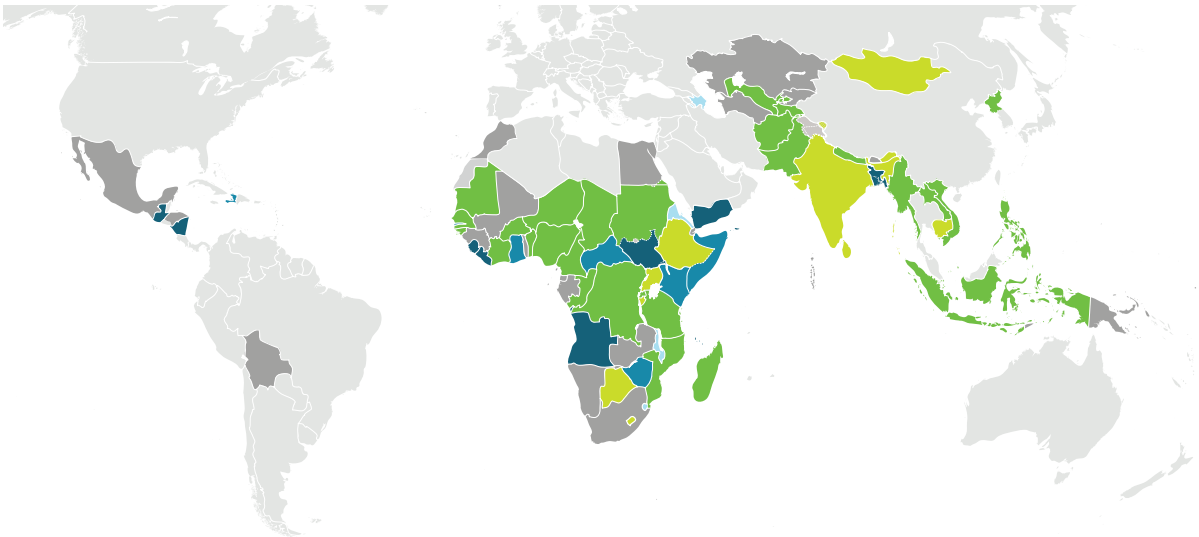
In 2000, only five countries in sub-Saharan Africa had effective two-dose coverage.



2000

Vitamin A supplement two-dose coverage

By 2014, this number had more than tripled, to 17 countries in the region.



2014

Vitamin A supplement two-dose coverage

effective coverage

80% or greater | 60%-79% | 40%-59% | 20%-39%

very low coverage

less than 20% | no data | non-priority country

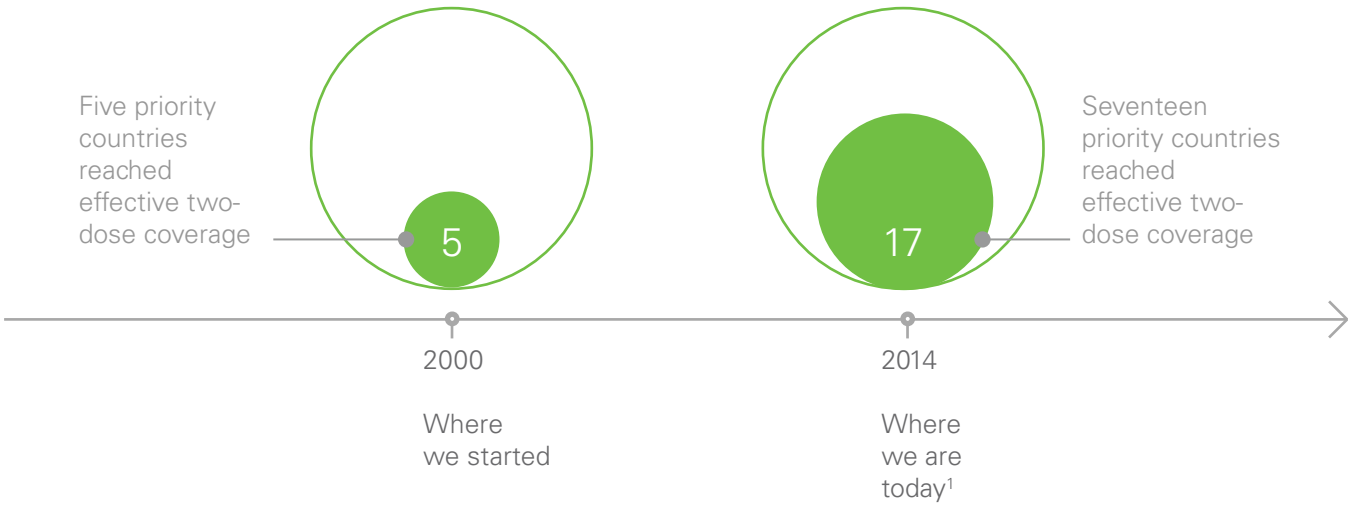
Source: UNICEF global databases, 2015. Based on administrative reports from countries.

Note: These maps are stylized and not to scale and do not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Sudan and South Sudan has not yet been determined. The final status of the Abyei area has not yet been determined.

The gains made since 2000 are an important start. But we still have a long way to go.

Sub-Saharan Africa's high under-five mortality rates mean that further progress is critical.

Number of priority countries reaching effective two-dose coverage in sub-Saharan Africa, 2000 and 2014



About one third of priority countries lack two-dose coverage estimates, and little has changed since 2000. This data gap must be addressed moving forward.

At the same time, there has been a threefold decrease in countries with the lowest coverage (<20 per cent). This category must be eliminated moving forward.

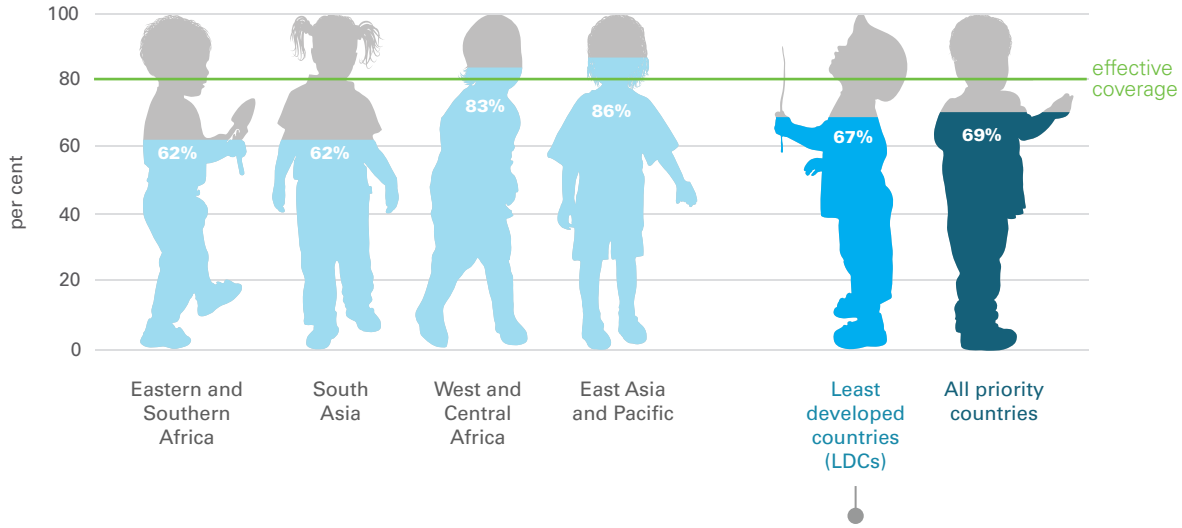
Source: UNICEF global databases, 2015. Based on administrative reports from countries.

[1] The latest available data for two-dose coverage with vitamin A supplements are from 2014. The 2015 data are expected to be released in the fall of 2016.

Effective two-dose coverage *is* possible.

Two regions achieved effective coverage in 2014.

Percentage of targeted children fully protected with vitamin A supplements, by region, 2014



Yet 46 million of the world's most vulnerable children were left behind.

Number (millions) of targeted children in LDCs, fully protected and unprotected, 2014

92 million targeted children in LDCs fully protected

46 million targeted children in LDCs left unprotected...

...putting them at an increased risk of disease and death.

= 4 million fully protected

= 4 million left unprotected

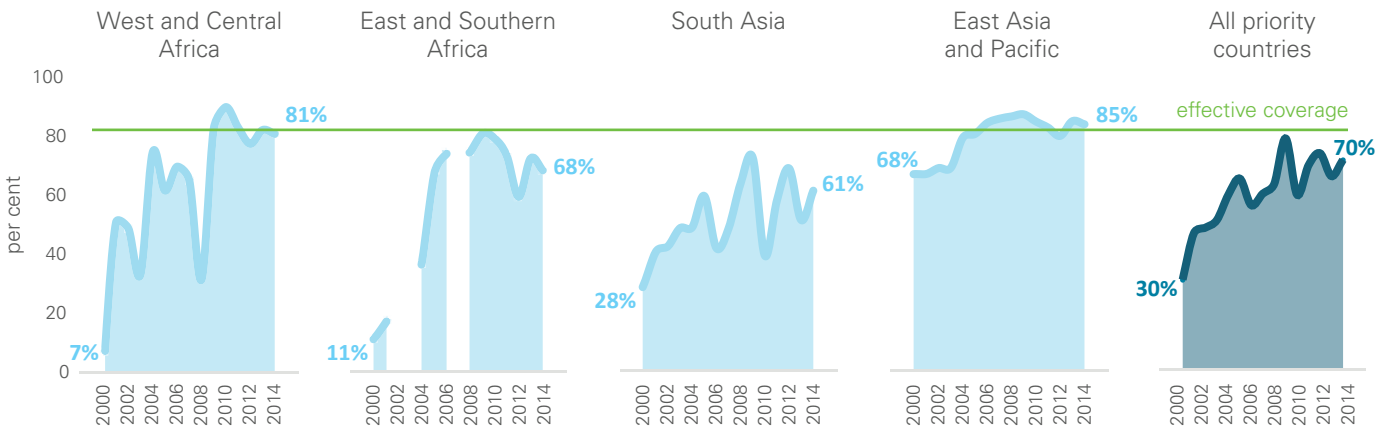
Source: UNICEF global databases, 2015. Based on administrative reports from countries.

Note: Regional averages only represent priority countries within regions. For example, as China is not a priority country for a national-level programme, it is not included in the East Asia and Pacific average.

There is still much work to be done: few regions are achieving consistent effective coverage over the long-term.

Fluctuations in coverage have left some of the most vulnerable children at risk.

Trends in percentage of targeted children fully protected with vitamin A supplements, by region, 2000-2014*



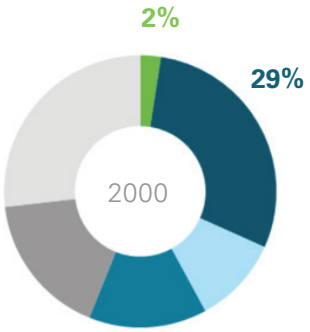
We can steady fluctuations and ensure consistent effective coverage with three ingredients.

Source: UNICEF global databases, 2015. Based on administrative reports from countries.

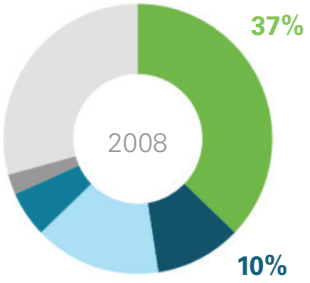
*The trend analysis for all priority countries is based on 23 countries with available data for each year from 2000 through 2014, and accounts for 69 per cent of the under-five population in 2000 and 66 per cent in 2014. Regional analyses are similarly based on a subset of countries with available data for each year shown. In some cases, selected years are left out of the series to accommodate countries missing data for one or two years. This affected Eastern and Southern Africa in 2002, 2003 and 2007, and is represented as breaks in the line/area. Regional estimates represent data from countries covering at least 50 per cent of the under-five population in priority countries in that region. Trends are only presented for regions with sufficient data availability.

Child Health Events: The best strategy for achieving long-term, sustainable coverage.

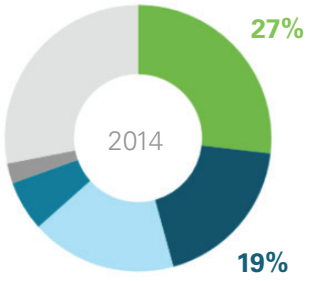
Breakdown of main vitamin A supplement delivery mechanisms, 2000, 2008 and 2014



In the year 2000, Integrated Child Health Events were almost nonexistent and polio immunization campaigns were effective opportunities to distribute vitamin A supplements.



With progress towards polio eradication, Child Health Events were developed as a mechanism to help fill the delivery gap and ensure access for the most vulnerable.



But the resurgence of polio campaigns may have reduced their use – and today, Child Health Events are not being employed widely enough. To be effective, they must be integrated into and tailored to the strength of the health system, especially as polio campaigns continue to scale back. They must also be adapted to local needs and the delivery mechanism may evolve over time.

Why are Child Health Events so effective?

They target vulnerable communities and achieve effective coverage in settings plagued by fragility, weak health systems and high under-five mortality rates.

They also deliver essential interventions such as immunization and medication to treat children with worms.

While high-dose vitamin A supplements need to be provided every 4-6 months until age 5, children's contact with the health system becomes less frequent after the first year of life. Without scheduled health clinic visits for things like vaccination, there are fewer opportunities to routinely reach older children with the two requisite doses.

This is why Child Health Events are so important. They extend the health system to bring services right to the communities that need them, helping to ensure that every child is fully protected.

Child Health Events are one of the most equitable delivery strategies because they bring vitamin A supplements directly to communities.

Child health event

Polio immunization campaign

Routine health system contacts

Other

No distribution

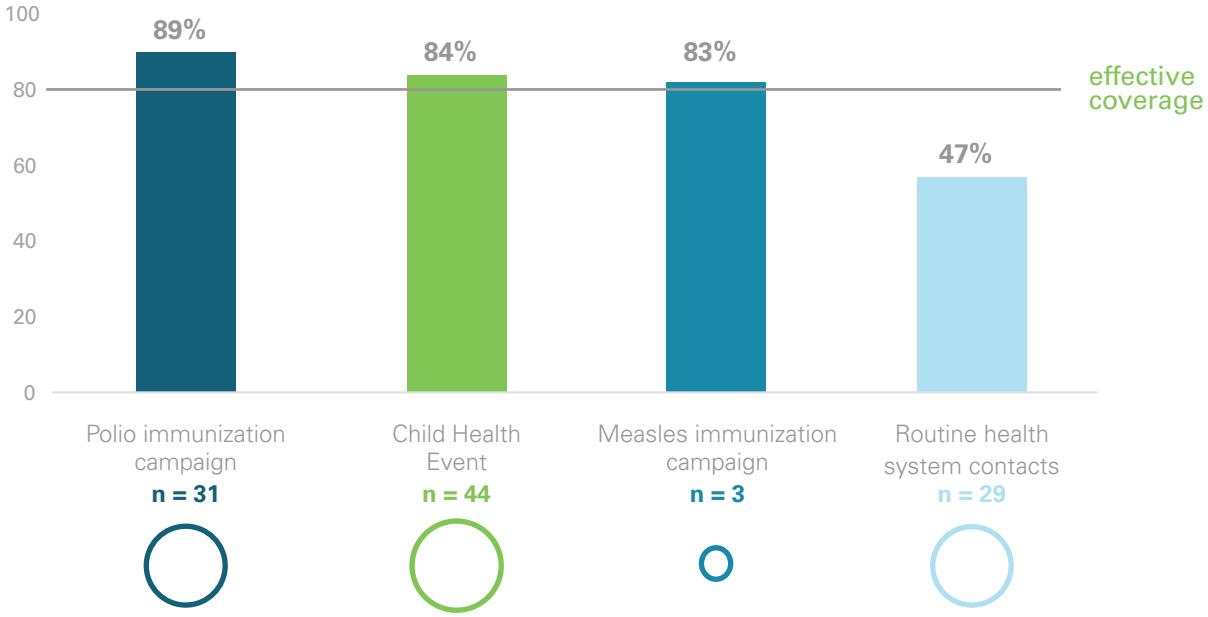
No data

Source: UNICEF global databases, 2015. Based on administrative reports from countries.

Child Health Events can help many countries extend the health system to reach the most vulnerable.

Child Health Events are the key to effective coverage moving forward.

Mean vitamin A supplement coverage rate by delivery mechanism, 2014



Source: UNICEF global databases, 2015. Based on administrative reports from countries.

What will it take to ensure that all children in priority countries are fully protected?

We can do a lot with a little.

= $0.02

One dose of vitamin A costs just US $0.02.

= $1.20

The average total cost, including delivery, to fully protect one child in South Asia or sub-Saharan Africa with two doses per year is US $1.20.

= $64

The estimated cost per death averted can be as low as US $64 when effective programmes are implemented.

But we need to refine our strategies to ensure the greatest impact. Here's how.

Ensure Child Health Events are a key part of the health system and are used to boost coverage, particularly where the health system is weak.

Leverage Child Health Events

Strengthen links with the health system and deliver the first dose of vitamin A early – ideally, as part of the routine 6 month health visit.

Link better, deliver early

Improve reach by identifying and targeting the most vulnerable children.

Reach the most vulnerable

Strengthen data quality and usage to enhance programme delivery.

Improve data quality and use

Sustained

effective coverage

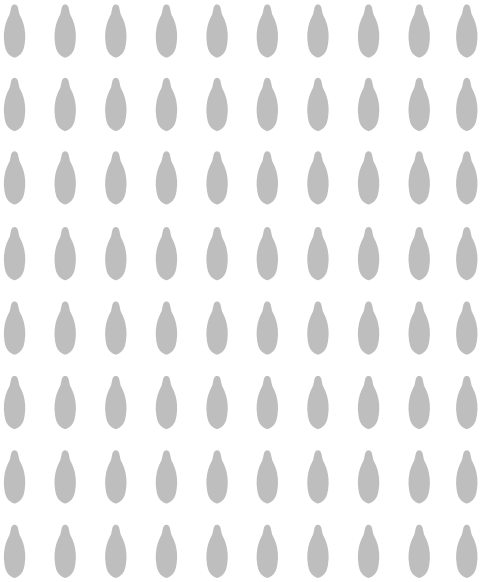
in all priority countries

Together, these strategies will help to ensure that every child in need gets his or her two drops of life.

Our partners have helped us reach some of the world's most marginalized children. We need that support to continue.

A special thanks to the Government of Canada

8 BILLION
VITAMIN A CAPSULES



each silhouette represents
100 million capsules

Government of Canada **Gouvernement du Canada**

Thanks to a donation programme financed by the Government of Canada and implemented through the Micronutrient Initiative, UNICEF has received more than 8 billion capsules since 1998, which, when combined with programme financing, have been critical to maintaining strong Vitamin A supplementation programmes.

4 MILLION

The Micronutrient Initiative estimates that more than 4 million deaths have been averted during this time.

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For information on the data contained in this brochure:

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