Protecting Every Child: Addressing Immunization Gaps in Southern Yemen

Briefing Note - August 2026

Overview

Yemen's health system has been severely damaged by more than a decade of conflict. Displaced health workers, damaged clinics, and severe funding shortfalls have left millions of people without reliable access to health care. Immunization efforts, like every other essential service, have suffered as a result. This briefing does not attempt to address that access crisis in full. It focuses instead on a second, distinct barrier to immunization, one that persists even in places where clinics are functioning and vaccines are free. The specific districts of southern Yemen studied here were chosen precisely because their health facilities are reachable and vaccines are provided at no cost, and yet most children still go unvaccinated. The reason is often fear, mistrust, and the power of who within the family gets to decide whether a child is vaccinated or not.

Yemen is one of the countries with the highest number of unvaccinated children in the world, and conflict-driven damage to health infrastructure remains a central, well-documented cause of that gap nationally[i]. Roughly one in four Yemeni children has not received the full set of recommended vaccines, and 17 percent are classified as zero-dose children, meaning they have never received a single dose of vaccine. By comparison, in the United States, about 1% of children under two years old are zero dose.

In response in 2024, the IRC developed a social and behavior change strategy built on two channels at once: equipping trusted members of the community, and engaging caregivers directly with practical tools to act on that trust. This briefing outlines that approach, the results it has produced, and what donors can do to help it reach more children. Alongside continued investment

in access and health system strengthening more broadly. An independent survey conducted after the project ended found that children were substantially more likely to complete the full vaccination schedule when their caregivers trusted vaccines and believed they protect children, early evidence that the trust caregivers gain from this approach is tied to real vaccination outcomes.

The Scale of the Problem

More than a decade of conflict has put Yemen's health system has under severe strain, with routine immunization one of the first services to suffer as a result. As an example, national coverage for the measles-containing vaccine (MCV1) fell to 41 percent in 2025, down from 63 percent in 2012[ii].

Physical access remains a serious, separate crisis

Much of Yemen's population still cannot reliably reach a functioning health facility at all. As of early 2026, an estimated 40 percent of the country's health facilities were not functioning, or were at risk of closing, due to funding shortfalls and humanitarian partners scaling back operations[iii]. UNICEF estimates that 17.8 million people in Yemen, including a majority who are children, lack adequate access to health care altogether[iv]. Addressing this crisis requires direct investment in clinics, supply chains, and the health workforce, separate from the behavioral barriers described in the rest of this briefing.

The consequences are visible in disease outbreaks that are otherwise preventable. Yemen recorded 27,517 measles cases and 260 deaths during its 2024 outbreak, among the highest figures reported globally that year[v]. Measles has continued at alarming levels since, with Yemen recording 11,354 cases between October 2025 and March 2026 alone, the second-highest caseload of any country worldwide during that period[vi]. Since 2021, the country has also recorded 452 cases of circulating variant poliovirus, 98 percent of them in children under five[vii].

Yemen, alongside Sudan and Syria, accounts for nearly 87 percent of all zero-dose children in the Middle East and North Africa region[viii]. Globally, Yemen is consistently named among the countries with the highest concentrations of zero-dose children, alongside Nigeria and the Democratic Republic of Congo[ix].

Nationally, an estimated one million children remain unreached by routine immunization services altogether, and the wider effort to close this gap, including the project described in this briefing, is designed to complement Yemen's Ministry of Public Health and Population's own immunization program rather than operate in parallel to it.

The evidence base for this briefing comes from formative research conducted by IRC's Airbel Impact Lab in December 2025, combining in-depth interviews and focus group discussions with 290 caregivers, health workers, teachers, and religious leaders, alongside observations at 15 health facilities, across five districts in four governorates: Lahj (Yafaa), Aden (Al Buriqa), Abyan (Ahwar), and Hadramout (Tareem and Al Qatn). These districts were selected because their health facilities are functional and reachable, which makes it possible to address the behavioral barrier described below separately from the access crisis addressed above. The patterns described in the rest of this briefing are drawn directly from that evidence base.

Why Parents Say No

Based on the research findings, four patterns drive hesitancy across these districts, spanning individual belief, family decision-making, and community influence.

Fear framed as protection

For many caregivers declining vaccination, the intention is one of protection. Short-term side effects such as fever, swelling, or temporary difficulty walking are visible and immediate, while the longer-term protection a vaccine provides is invisible and only proven over time. Behavioral scientists call this present bias, the tendency to weigh a small, certain cost today more heavily than a larger, uncertain benefit in the future. As one mother from Yafaa described it: “The child enters in good health, and comes out in bad health, meaning that after receiving the vaccine, they suffer from side effects, like fever or swelling, and sometimes they can't walk for days.”

This dynamic is reinforced by word of mouth. Caregivers frequently pointed to a neighbor's or relative's child who reacted badly to a dose, and let that single account outweigh the broader, harder-to-observe benefit of protection from disease. Compounding the problem, many caregivers receive little or no guidance on how to manage side effects before they occur, so a fever or bout of swelling that could have been anticipated risks becoming the reason to stop vaccinating altogether.

> *I will never allow [my children] to be vaccinated out of love for them. If I ever do vaccinate them, I won't be at ease, and I'll always feel anxious about their safety.*
>
> A vaccine hesitant father from Hadramout

The free vaccine paradox

A striking and counterintuitive pattern is that vaccines provided free of charge, particularly by international organizations, sometimes deepen suspicion rather than easing it. Some caregivers reasoned that something of real value would not be given away for nothing and interpreted free vaccination campaigns as evidence of a hidden motive. This suspicion can take several specific forms: doubts about whether vaccines delivered through mobile campaigns are stored and handled correctly, skepticism about the medical qualifications of the health volunteers administering them, and in some cases a belief that free vaccines are connected to a foreign effort to reduce fertility or shrink the population. This was especially pronounced in Yafaa district, where some religious leaders share the same suspicion and discourage vaccination as a result.

Who gets to decide

Across Yemen, mothers are almost always the primary caregivers, yet in most households it is fathers who hold the authority to approve or refuse vaccination. Cultural norms in many communities can compound this, with mothers often unable to travel to a health facility without a husband or male relative present. This authority can also extend to some fathers distrusting mothers to make the right call even when they aren't present to supervise it. A father from Abyan put it directly: “Women are influenced by other women and sometimes they listen to them and go

to vaccinate their children. I don't doubt that my wife vaccinates the children in my absence." His comment reflects a broader pattern, in which some men view mothers as more easily persuaded by peers and therefore requiring continued oversight, rather than as capable decision-makers in their own right.

Elder female relatives can add a further layer to this dynamic. According to IRC's research, grandmothers often carry real influence over a father's decision, but they are themselves often more likely to be vaccine hesitant than younger mothers, meaning their involvement can either help to counter or reinforce refusal depending on their own views towards vaccines.

The weight of trusted voices

Religious leaders, health workers, and teachers carry significant influence in these communities, and so if they are known not to vaccinate their own children, it risks reinforcing hesitancy among caregivers. Likewise, when these same figures speak in favor of vaccination, or are seen vaccinating their own children, it can move caregivers toward action. A related effect operates through children themselves. By teaching students about the importance of vaccination, teachers aim for a longer-term shift in household attitudes as children raise the subject with their own parents.

Spotlight: Waheeb, From Vaccine Hesitant Father to Community Advocate

Waheeb is a teacher in Jabal Al Yazidi village, Yafa'a district, Lahj governorate. For years he repeated the same fears about vaccines that circulated among his neighbors, drawn from rumors rather than medical advice. When his eldest daughter developed a high fever after her first vaccine, neighbors blamed the vaccine and urged him to stop, and he became one of the voices discouraging others from immunizing their children. "I was shocked," he recalls. "I believed the vaccine caused my daughter's condition because that was what everyone around me said."

Community volunteers supported by the IRC kept visiting his area despite difficult terrain and long distances. One of the health volunteers, someone Waheeb knew personally, explained the difference between temporary side effects and real vaccine harm and answered questions no one had addressed before. Waheeb decided to vaccinate his youngest child. Before vaccination, his son was frequently ill with diarrhea, coughing, and weakness. After completing the vaccination schedule, his health improved significantly and he no longer needed repeated hospital visits.

"I moved from being someone who warned people against vaccination to someone who encourages it,"

Without any formal role or salary, Waheeb began raising awareness in his village and neighboring communities, using school announcements, loudspeakers, personal visits, and his own vehicle to inform families about vaccination days. His wife created WhatsApp groups with dozens of women to share accurate information. After a measles outbreak affected a nearby family, Waheeb helped them understand the importance of immunization and guided them toward services.

> *"People listen when the message comes from someone they trust," he says. "Especially when they know you once believed the same rumors."*

Today, most families in his village accept vaccination, and Waheeb continues advocating in nearby communities where resistance remains stronger.

What the IRC Is Doing About It

The IRC's response, developed with its Airbel Impact Lab[x], is built on two parallel tracks: equipping the community figures caregivers already trusted to advocate credibly, and giving caregivers themselves practical tools to act on that trust once it exists.

This approach was formally launched in July 2025, when the IRC, in partnership with Yemen's Ministry of Public Health and Population in Aden, publicly launched the strategy, marking the ministry's endorsement of the approach and reflecting the evolution of this work within IRC's wider positioning on childhood immunization in Yemen.[xi]

This project is funded by Gavi, the Vaccine Alliance, and targets zero-dose children, defined as children who have never received a single vaccine dose, within the five districts described in this briefing. Children and caregivers reached through the project also receive follow-up support to complete the remainder of the routine vaccination schedule, including reminders and continued engagement through the community influencers described below.

Immunization support is not limited to this project. IRC has provided vaccines in Yemen since 2012 and has integrated immunization programming into the majority of its health and nutrition portfolio in Yemen, across the majority of its donor base. The purpose is to ensure that routine vaccination follow-up is a standard component of IRC's child health programming rather than an activity specific to a single grant. This reflects the priority IRC places on immunization within its broader health programming and is the basis for advocating for continued investment.

Working through trusted community figures

Based on IRC's research, the most powerful shifts in caregiver behavior come direct observation. Caregivers who witness a measles or polio outbreak spread more severely among unvaccinated children than vaccinated ones often describe this as the turning point in their own view, even when the same message from a health worker or religious leader had not previously persuaded them. This is why the IRC's strategy pairs messaging from trusted figures with testimonials from caregivers who have already changed their own view.

Religious leaders, health workers, community health volunteers, and teachers are recruited on the basis of the same qualities known to drive trust in these communities. They are already respected, proactive in community affairs, and turned to for advice, rather than appointed from outside. Once recruited, they take part in an initial training covering myth-debunking guidance, structured practice responding to common concerns through role play, and a reference guide on explaining and managing side effects, since a lack of preparedness on this point is a known driver of dropout.

The approach builds in mechanisms designed to sustain engagement: a public commitment to participate, made in front of peers and local officials, small recognition items such as certificates or pins that mark participants as vaccination champions within their community, and closed peer group channels where influencers can share what has and has not worked. Community leader engagement of this kind has produced measurable gains in immunization coverage in other fragile settings.[xii]

Spotlight: Fawzi and Samia, Community Volunteers in Aden

Fawzi is a community assistant responsible for the Salah al-Din area of Al Buraiqah district, one of Aden governorate's largest districts and home to many displaced families with historically low vaccination coverage. Samia is a school principal and community activist in the same area, who has also previously worked with a UN organization in Egypt. Both work alongside IRC's vaccination teams to reach families who distrust or are simply unaware of the program.

Fawzi describes his role as opening doors the outreach team could not open alone: “We helped the team enter the areas, and it was under our supervision.” When caregivers refuse, he explains the reasoning directly.

> *We advised them that this is protection for their children, keeping diseases away from them. We have done our duty according to the training we received from IRC's team.*
>
> Fawzi, community assistant

Samia explained why her own conviction has to come first: “For me to take part in this program, I had to understand the subject myself and be convinced by what I was told. Once I was convinced, I could convince the person in front of me.”

She also described the distrust her team regularly encounters: “Some families do not yet feel a full sense of trust or security. They say to us, we have not received help with other basic needs, so why would something like this be offered for free now, there must be a reason behind it.”

Infrastructure gaps compound the problem. Samia described the cold chain challenges in her own area: “Our refrigerator is broken. We have big challenges. When the rains and floods

came, the health unit was damaged and flooded." Her team now travels to the district center to collect vaccines before returning to reach families in more remote areas.

Their standing in the community can succeed where outreach alone cannot. Samia recalled a local sheikh who had refused to vaccinate his own four children:

> *As soon as he saw us, he brought his children out. He said, you know you are a source of security and trust.*
>
> Samia, a school principal and community activist

Engaging caregivers directly

The tools provided to caregivers are designed around the specific barriers described above rather than general awareness-raising. Present bias and simple forgetfulness are addressed through a visual vaccination calendar that prompts caregivers to commit to a specific date and time in advance, a technique known in behavioral science as an implementation intention, and through reminders delivered close to the appointment via mosque announcements. The fear of unmanaged side effects is addressed directly at the point of vaccination. Caregivers receive a simple counseling card explaining what to expect and how to manage common reactions before they leave the clinic, rather than discovering this information only once a child is already unwell at home.

The two tracks are intended to work together rather than in sequence. Caregivers hear the same message from a trusted local figure and see it reinforced through a practical tool, rather than receiving information from a single source. Health workers reported that this combination is beginning to shift how caregivers describe the health system itself. A healthcare worker in Hadramout described the impact: "This change in their attitude towards vaccination is due to the trust we have earned from the community towards the health workers and the vaccines."

A follow-up survey of the same six districts, carried out after the project ended, found substantial gains among caregivers of zero-dose and under-immunized children on exactly these measures:

Indicator (caregivers of zero-dose / under-immunized children)	Before	After
Knowledge of immunization benefits	47%	78%
Positive attitude toward vaccines	35%	68%
Trust in immunization services	39%	66%
Religious acceptance of vaccination	47%	70%
Health workers as main trusted information source	64%	87%

To date, this project has trained 1,579 community influencers across the five target districts, including 1,359 community leaders and 220 health workers and community health volunteers.

Since the project began, 5,152 children have received a first vaccine dose through this initiative, and first-dose uptake across the target districts rose from 85 percent to 95 percent, while the share of children who had received no vaccine at all fell from 15 percent to 5 percent. The harder part is what comes next. Nearly half of children, 47 percent, do not go on to receive every recommended dose, and roughly one in five children who received a first dose did not return for their later ones.

The same follow-up survey also found that a child's chance of completing the full vaccination schedule depended more on caregiver trust and belief than on anything else measured, more than the caregiver's education, district, or whether the family was displaced. Children whose caregivers trusted vaccines or believed they protect against disease were substantially more likely to finish the full schedule than children whose caregivers did not.

Building trust is the foundation of this project and turning that foundation into completed vaccine schedules is the next stage of the work. The share of children fully immunized held roughly steady over the same period, even as trust and belief rose sharply among the caregivers targeted in this project. Trust helps a family bring a child in once. However, it does not remove every barrier to the visits that come after. A father or grandparent may still say no. A family may still lack transport. A child may still have had a hard time with an earlier dose. Any of these can stop a child from finishing the schedule, even when the caregiver now trusts vaccines. Closing that gap will take continued investment in trust-building through community and religious leaders.

Opportunities to Scale

The approach described above remains limited to five districts and a single funding cycle. Based on its design and early results, four opportunities stand out for extending its reach.

- Expand beyond the five original districts into additional areas with similar profiles. Al Shishr in Hadramout, for example, shares the geographic and cultural characteristics of districts already studied, with a functioning health system, and is a candidate for early expansion.
- Replicate the community influencer model, including the training, recognition, and peer accountability structures described above, in new districts and governorates.
- Integrate the approach with the Ministry of Public Health and Population's routine immunization system referenced above, so that gains are not dependent on a single project cycle.
- Apply the same behavioral approach to other under-vaccinated groups, including catch-up campaigns for the estimated one million children nationally who remain unreached by routine services.

Challenges That Remain

Funding cuts are already forcing reductions across Yemen's health sector, and further cuts could reverse the gains described in this briefing. Yemen's 2025 Humanitarian Needs and Response Plan was funded at only 25 percent, and 453 health facilities across the country faced partial or

imminent closure as a result[xiii]. Reductions of this scale do not only affect care that has not yet been delivered. They also put at risk the trust this project has spent months building with caregivers and community influencers, and they raise a real risk that children not yet reached never receive a first dose, and that children who have started the vaccination schedule do not complete it.

Beyond funding, four further operational and social challenges will shape whether this approach can be sustained and scaled.

- Sustaining influencer engagement. Initial training and public commitment ceremonies generate strong early motivation, but that motivation is not self-sustaining. Without continued contact, recognition, and opportunities to troubleshoot difficult conversations, community figures' engagement risks fading well before caregiver behavior has fully shifted.
- Shifting gender norms takes longer than shifting awareness. A caregiver can update their beliefs about vaccine safety after a single conversation with a trusted health worker, but changing who holds the authority to act on that belief, and whether mothers can travel to a clinic independently, is a slower, generational process that this project can influence only at the margins.
- Resourcing continuous engagement. The tools described above, reminder systems, refresher training for influencers, and ongoing monitoring, all depend on funding that continues well past the initial training and campaign period. Where that funding is not sustained, this operational challenge compounds the funding risk described above.
- Misinformation regenerates. Debunking a specific rumor does not inoculate a community against the next one. New concerns, about a different vaccine, a different side effect, or a new claim about international motives, continue to circulate through informal networks, meaning the work of building trust has no fixed endpoint and requires ongoing monitoring rather than a single corrective campaign.

Recommendations for Donors

- Protect immunization funding from broader budget reductions, and where cuts are unavoidable, sequence them to preserve completion of vaccination schedules already underway rather than halting outreach mid-course.
- Continue investing in health system strengthening and physical access across Yemen. Behavior change programming like the one described here only works where clinics and vaccine supply already exist, and much of the country still needs that foundation built or rebuilt.
- Fund multi-year programming rather than single-cycle campaigns. Trust and norm change take sustained contact over time, not a one-off push.
- Fund the geographic and programmatic expansion opportunities outlined above, rather than requiring a new baseline assessment in each additional district.
- Invest in monitoring that tracks adherence to the full vaccination schedule, not only whether a child received a first dose.
- Fund the technical work needed to integrate this approach into the Ministry of Public Health and Population's systems, rather than treating that integration as a future ambition without dedicated resources.

Conclusion

Yemen's immunization gap has two causes that both need to be addressed. Across much of the country, conflict has damaged clinics, supply chains, and the health workforce, and rebuilding physical access remains an urgent, unfinished task. But even where access already exists, trust, fear, and who holds the power to decide can keep a child unvaccinated. The IRC's early work in southern Yemen, supported by Gavi and reflected in immunization programming integrated across nearly all of IRC's work, shows that when trusted voices speak clearly and caregivers are given practical tools rather than just information, behavior can change. That progress is not guaranteed to hold. Funding cuts already underway across Yemen's health sector put these gains at real risk of backsliding. The opportunity now is to support both efforts at once. Access needs to be rebuilt where it has broken down, and the behavior change approach described in this briefing needs to be protected and scaled, before children still unreached go without a first dose and children only partway through their schedule fail to complete it.

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