# **Smart Decisions**

## The 2024 G-FINDER Neglected Disease R&D Report Executive Summary



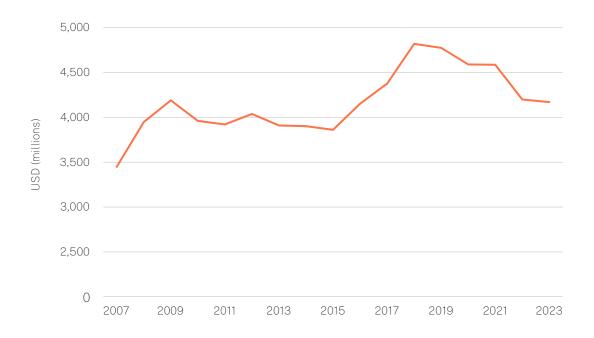


**G-FINDER** 

## How funding for individual neglected diseases changed in 2023

#### R&D funding remained stable after last year's \$350m drop

#### Total R&D funding for neglected diseases 2007-2023



Global funding for neglected disease R&D was basically stable at \$4.17bn in 2023, down by less than 1% (\$29m) from 2022 – or by just under 2% (\$70m) if we adjust for a slight net increase in survey participation. This failure to rebound from the big, inflation driven fall in 2022 left global funding nearly \$650m below its 2018 peak, and almost \$150m below its average over the previous decade.

The largest falls, in absolute terms, were for HIV/AIDS (down \$143m, -10%), bacterial pneumonia & meningitis (down \$30m, -61%) and diarrhoeal diseases (down \$20m, -12%), all reaching record lows. Mostly offsetting these were substantial increases for both TB (up \$69m, 9%) and malaria (up \$60m, 9%, partly thanks to new survey participants). Several traditionally less funded diseases enjoyed substantial growth, including record funding for leprosy and snakebite envenoming, alongside near-record totals for TB and dengue.

The 'big three' diseases – HIV/AIDS, malaria and tuberculosis – remained the top recipients of disease-specific R&D funding in 2023, as they have been, in some order, since the survey began in 2007. Together, they continued to account for 80% of disease-specific global funding, and around two-thirds of the overall total.

All three multi-disease categories – diarrhoeal diseases, kinetoplastids and helminths – were at or near record lows, with a big fall in diarrhoeal disease funding in 2023 following earlier reductions for the other two areas. Much of the long-term decline in these areas has been driven by reductions in funding targeting multiple pathogens within each category.

Diseases with moderate levels of funding (more than \$20m but less than \$150m) saw increases for snakebite and dengue – the latter mostly private drug R&D – which left them at or near record highs; while *Salmonella* funding was the lowest in more than a decade.

Among diseases with little R&D funding (between \$2.5m and \$20m) there was record funding for leprosy and at least some growth for cryptococcal meningitis, rheumatic fever and histoplasmosis; but bacterial pneumonia & meningitis funding fell to a record low.

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Six diseases were categorised as receiving almost no funding (less than \$2.5m): leptospirosis, scabies, Buruli ulcer, mycetoma, yaws & trachoma. Within this group, leptospirosis funding doubled, but to just \$2.4m and Buruli ulcer rebounded slightly, but there was essentially no funding for yaws and none at all for trachoma.

Overall multi-disease funding rose slightly, for the ninth year in a row; a fall in funding for multi-disease VCPs was offset by a rise in catchall 'Other R&D'.

## Who provided the funding for neglected disease R&D in 2023?

Overall funding stayed about the same, but both public and private sector funding was down, while philanthropic funding hit a near record high

While overall funding was relatively consistent, there were big changes in who provided it. Public sector funding fell, again, dropping by another \$103m (-4%) to its lowest level since 2015. Governments provided a record low 63% of global funding, mostly due to big cuts from the US, that record funding from India could not come close to offsetting.

Private sector funding fell too, dropping by \$52m (-8%), partly undoing two years of growth and leaving it roughly in line with its recent average. Participation-adjusted funding was down for both large and small pharmaceutical companies.

The substantial drops in both public and private sector funding were mostly offset by a big rise in philanthropic (largely Gates Foundation) funding, which rebounded by \$125m (16%) to \$929m – its highest total since 2008 and the second highest total ever recorded.

## What did this year's data tell us?

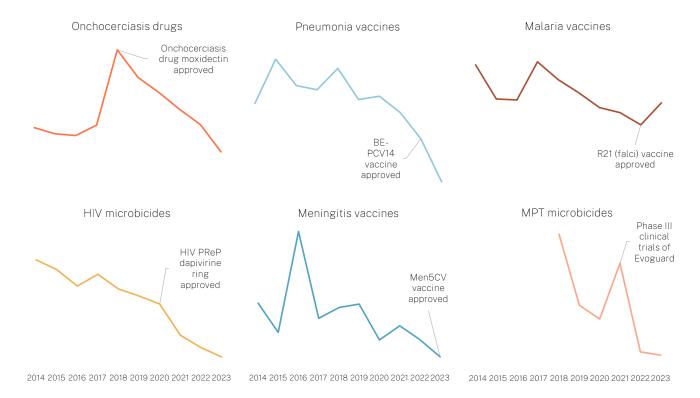
We can now link changes in funding to real world trends; including a shift away from vaccines – other than for TB – and rising private funding for diseases vulnerable to climate change

A high-level view of global funding for neglected disease R&D suggests that the situation has largely remained the same over the last five years. Funding peaked in 2018, and since then it has experienced a mostly gentle decline – largely due to increased global inflation eroding its buying power.

Beneath the surface, however, much has changed. By integrating funding data from the G-FINDER survey with our pipeline tracking and forward-looking funding announcements from the <u>Compass</u> project, we are gaining a clearer understanding of shifts in funders' priorities and how they align with real-world events.

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#### Product approvals versus R&D funding



We see funders adjusting their strategies in response to product approvals, often leading to reduced funding. Sometimes, these shifts are driven by promising products, such as the M72 TB vaccine, entering their expensive late-stage trials. And other times, as with the rapid rise in private sector dengue drug development, they are due to a literal shift in the global climate making a previously overlooked disease seem much closer to home. With overall funding stagnant or declining, prioritising one area means another will be deprioritised or sometimes even forgotten: after several years of decline, funding for trachoma R&D fell to zero in 2023. It joined yaws and mycetoma on the list of the most neglected of the neglected diseases.

Also increasingly neglected is funding for vaccine R&D, its fall driven by successful trials for malaria and unsuccessful ones for HIV.

Some kind of priority setting remains essential. While every area of unmet need represents a valuable investment, not all can be given equal priority. There is no single solution to unlock unlimited – or even sufficient – global funding. Smart choices need to be made.

In the report, we try to separate the signal of strategic shifts in global funding from the noise of the random changes in funding we observe every year. We show how the pipeline helps explain some, but not all, of what funders are choosing to focus on and argue that priority setting needs to be backed by the right data to maximise its impact.

We hope that G-FINDER provides funders with part of that picture by helping them monitor what others have spent, are spending, and will spend on a particular area; and by helping them identify other candidates and where they sit in the pipeline.

Estimating how many lives a yet-to-be-developed vaccine might save is daunting, but focusing on impact rather than just regulatory approval helps to keep the interests of patients at the heart of R&D decisions. As with the M72 TB vaccine, looking at a product's role in actual communities can guide not only how much funding it deserves, but how well it complements or replaces other tools, ensuring R&D genuinely improves lives.

As funders strive to build complementary portfolios that maximise impact, it is vital that they regularly revisit past allocations with the benefit of new evidence. In that light, it is encouraging to see funders actively redirecting their efforts in response to changes in burden and in the product landscape, to where past successes and failures point them next, making smart choices to drive future breakthroughs in global health.

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#### R&D funding by disease 2014-2023 ^

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under	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
HIV/AIDS	1,414	1,343	1,455	1,553	1,741	1,760	1,603	1,662	1,412	1,269	30
Tuberculosis	707	727	743	754	796	834	796	804	737	806	19
Malaria	715	701	729	780	794	742	732	718	631	690	17
Diarrhoeal diseases	216	197	188	199	212	199	175	155	164	144	3.5
Kinetoplastid diseases	184	154	176	181	188	189	180	149	133	133	3.2
Dengue	102	112	135	98	93	94	87	87	84	113	2.7
Helminth infections (worms & flukes)	113	96	93	106	114	113	94	97	109	94	2.3
Salmonella infections	80	84	113	98	107	94	90	78	84	78	1.9
Snakebite envenoming					9	14	18	20	22	31	0.7
Hepatitis B					12	11	19	17	33	25	0.6
	56	42	36	18	57	13	19	18	16	21	0.5
Leprosy	12	13	13	13	10	11	9	10	14	19	0.5
Bacterial pneumonia & meningitis	90	113	112	88	103	80	75	67	49	19	0.5
Cryptococcal meningitis	6.9	6.3	7.1	14	10	9.5	8.2	16	7.0	7.8	0.2
Rheum atic fever	2.0	3.3	2.1	2.1	2.3	18	25	18	3.5	4.9	0.1
Histoplasmosis							4.8	4.0	3.6	3.8	<0.1
Leptospirosis	1.5	1.5	2.7	3.6	1.9	2.3	1.6	1.5	1.2	2.4	<0.1
							1.3	2.0	1.9	1.6	<0.1
Buruli ulcer	4.4	2.2	3.4	4.9	3.0	3.2	2.8	0.8	1.0	1.5	<0.1
Mycetoma					0.7	1.1	0.8	0.8	0.5	0.6	<0.1
Yaws									< 0.1	< 0.1	<0.1
Trachoma	1.7	1.4	2.7	3.1	2.2	2.1	2.1	0.7	0.2	-	-
Platform technologies	29	45	93	64	81	113	146	166	282	276	6.6
Vaccine-related platform technologies	11	15	23	16	23	27	27	18	22	30	0.7
General diagnostic platforms & multi-disease diagnostics								13	11	12	0.3
Drug-related platform technologies	3.0	4.4	4.1	7.9	2.6	6.6	8.7	24	107	68	1.6
Adjuvants and immunomodulators	12	19	48	35	37	40	54	52	55	81	2.0
Biologics-related platform technologies	3.1	5.8	18	4.2	18	39	55	59	87	83	2.0
Multi-disease vector control			23	34	47	74	75	87	65	55	1.3
Core funding of amulti-disease R&D organisation	121	163	183	313	360	351	363	343	268	273	6.5
Other R&D	47	56	43	51	76	45	62	64	77	100	2.4
Total R&D funding	3,901	3,861	4,152	4,377	4,819	4,774	4,589	4,587	4,199	4,170	100

Multi-disease vector control products were added in 2017; the 2016 total was added retros pectively, and likely understates true funding. Mycetoma, snakebite envenoming and hepatitis B were added in 2018. Histoplasmos is and scabies were added in 2020. Biologics-related platform technologies were moved to as eparate category in 2021. Yaws was added in 2022.

\*\*Please note that some of the diseases listed are actually groups of diseases, such as the diarrhoeal illnesses and helminth infections.

\*\*No reported funding\*\*

To read the full report and download all the figures and tables as powerpoint slides, please visit www.impactglobalhealth.org/report-home-smart-decisions

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