# IA2030 vaccine impact results

#### Austin Carter

## 3/11/2021

## Global annual total with baseline

Year	Total deaths averted
2019 (baseline)	4255874
2021	4445873
2022	4623098
2023	4767638
2024	4908865
2025	5098639
2026	5251664
2027	5436265
2028	5591734
2029	5725507
2030	5842799

#### By disease global

2022

2022

2021

disease

2024

2023

## Global deaths averted 6 Disease D HepB Deaths averted (in millions by YoV) Hib **HPV** JΕ Measles MenA Ρ **PCV** Rota Rubella Т ΤВ ΥF

2026

Year

2024

2028

2027

2026

2030

2028

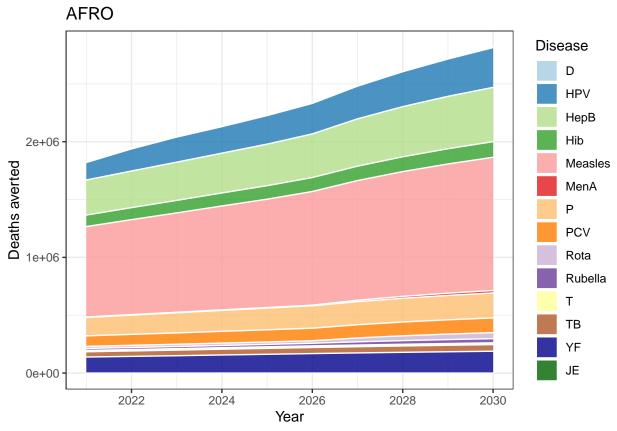
2029

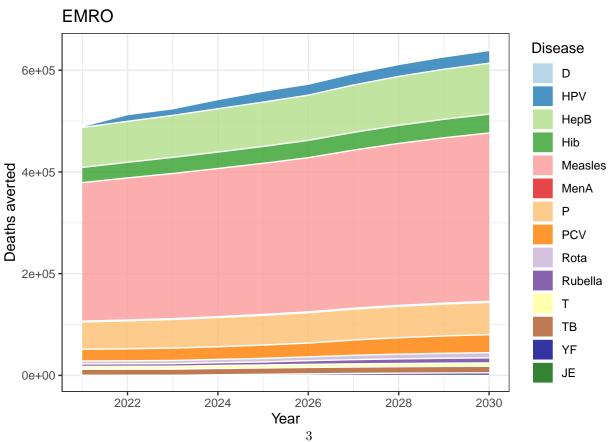
2030

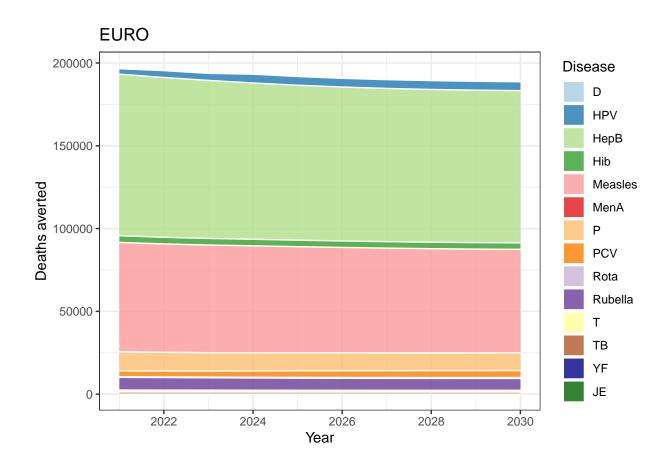
D  $14906.068\,15085.309\,15244.439\,15391.233\,15531.320\,15670.68\,15802.73\,15926.30\,16039.87\,16142.56$ **HPV**  $190674.12\mathbf{3}63272.45\mathbf{8}02464.47\mathbf{2}35754.72\mathbf{1}2424509.28\mathbf{4}66654.5\mathbf{1}492720.4\mathbf{4}519286.6\mathbf{2}346283.5\mathbf{7}573724.18$ HepB Hib  $200826.74 \underline{\mathbf{9}} 06223.86 \underline{\mathbf{3}} 11281.25 \underline{\mathbf{9}} 21754.90 \underline{\mathbf{9}} 29304.20 \underline{\mathbf{4}} 35351.9 \underline{\mathbf{9}} 40609.0 \underline{\mathbf{7}} 45393.3 \underline{\mathbf{0}} 49811.0 \underline{\mathbf{9}} 53897.69$  $_{
m JE}$  $5635.016 \ \ 5592.173 \ \ 8998.733 \ \ 11927.066 \ 13487.408 \ 14346.95 \ 15213.17 \ 15718.73 \ 15991.68 \ 16107.86$ Measles 1671704.924717750.190760094.260803174.161845765.103897408.96956945.620008647.42053769.32093542.80 $6029.442 \ \ 6217.314 \ \ 6421.438 \ \ 6617.647 \ \ 7028.675 \ \ 7409.92 \ \ 14073.05 \ 18482.68 \ 21444.27 \ 23474.89$ Ρ PCV  $139472.95454742.09372463.64785608.45896262.79 \pm 0.04912.54216690.8225872.9233204.4239174.39174$  $31712.297\,34637.026\,38328.107\,41417.188\,44283.377\,46742.45\,61748.32\,72074.06\,79303.67\,84475.60$  $\mathbf{T}$  $42337.632\ 42926.609\ 43453.417\ 43946.712\ 44427.251\ 44914.06\ 45388.20\ 45842.84\ 46267.61\ 46655.45$ TBYF  $143400.08 \\ \underline{1}49365.34 \\ \underline{8}55131.21 \\ \underline{1}62969.87 \\ \underline{3}69830.47 \\ \underline{1}77122.14 \\ \underline{8}3558.82 \\ \underline{8}9360.3 \\ \underline{9}4677.1 \\ \underline{1}199613.29$ 

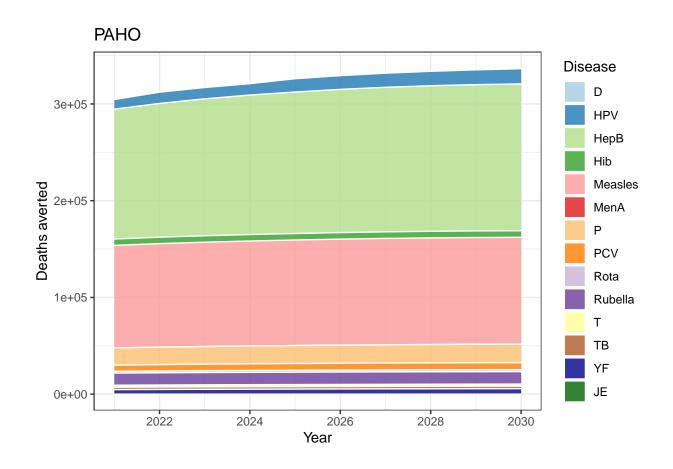
2025

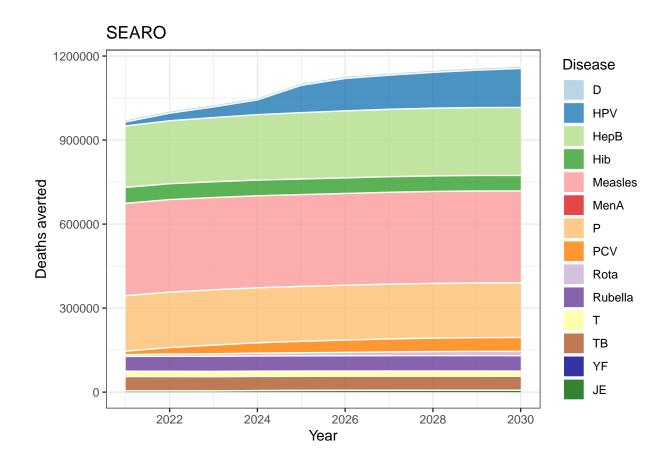
### By disease for each region

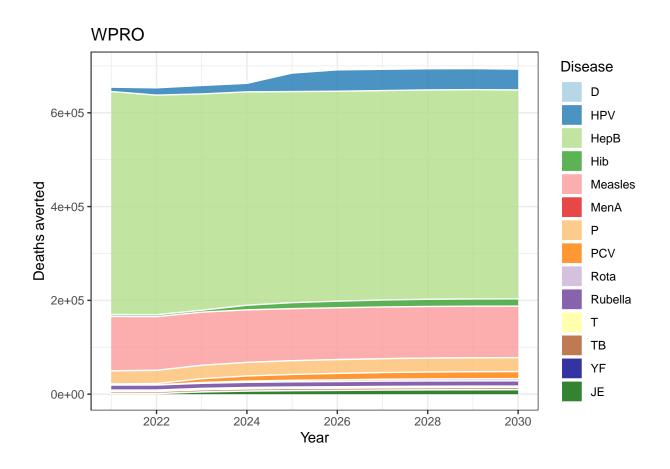




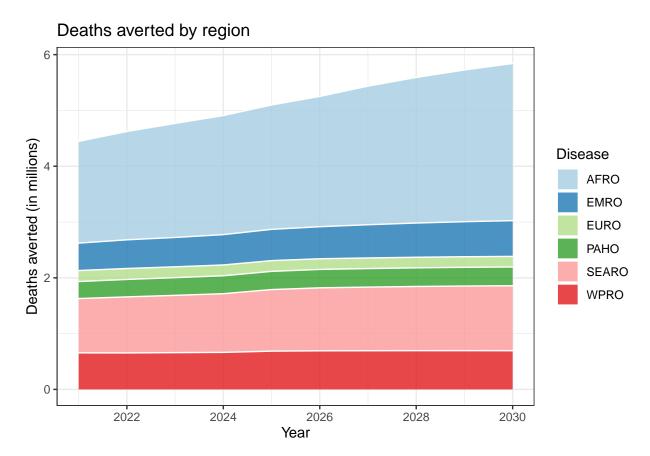






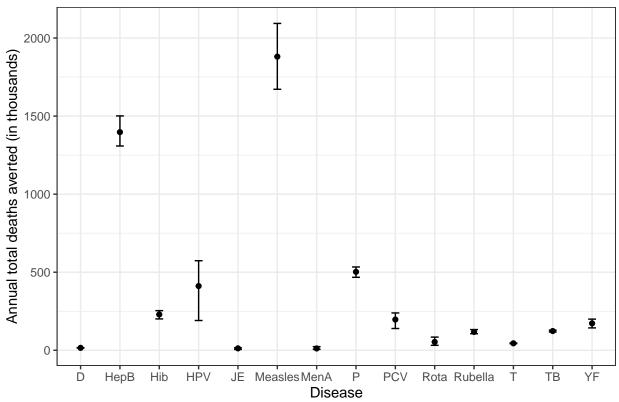


## Total by year by region



#### By disease mean annual total deaths averted with min and max annual

## Mean and range of annual total deaths averted by disease



disease	mean	min	max
D	15574.05	14906.068	16142.56
HPV	411534.44	190674.123	573724.18
HepB	1397235.78	1308552.458	1501116.15
Hib	229445.41	200826.749	253897.69
Measles	1880880.28	1671704.924	2093542.80
MenA	11719.93	6029.442	23474.89
P	502471.00	467359.323	533496.61
PCV	196840.52	139472.954	239174.39
Rota	53472.21	31712.297	84475.60
Rubella	117351.61	106024.620	132608.79
$\mathbf{T}$	44615.98	42337.632	46655.45
TB	123262.31	117236.972	128768.55
YF	172502.87	143400.085	199613.29
JE	12301.88	5592.173	16107.86
Total	5169208.28	4445872.663	5842798.81

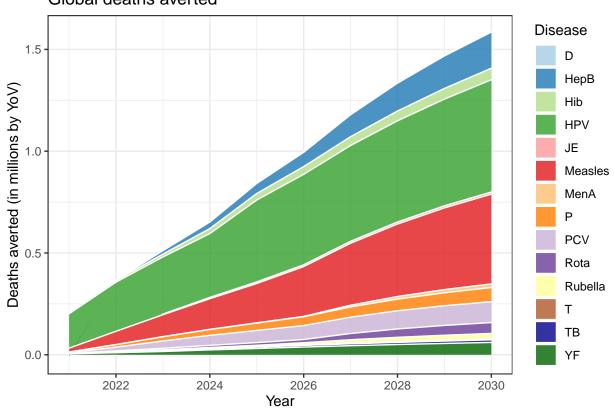
### Incremental

#### Global annual incremental

Year	Incremental deaths averted
2021	189998.8
2022	367219.7
2023	511760.2
2024	652807.6
2025	842435.0
2026	995460.3
2027	1180061.4
2028	1335530.5
2029	1469303.3
2030	1586594.8

#### By disease global

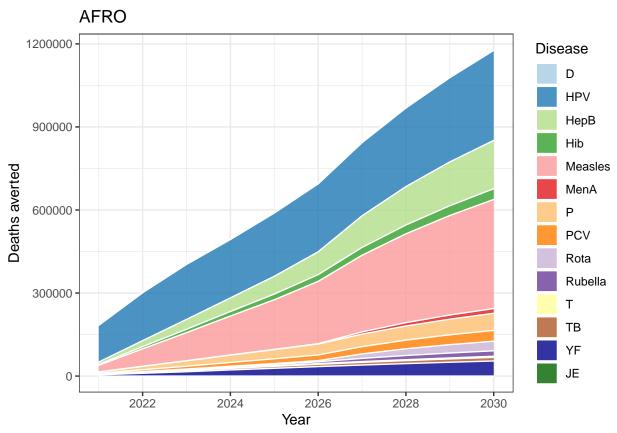
#### Global deaths averted

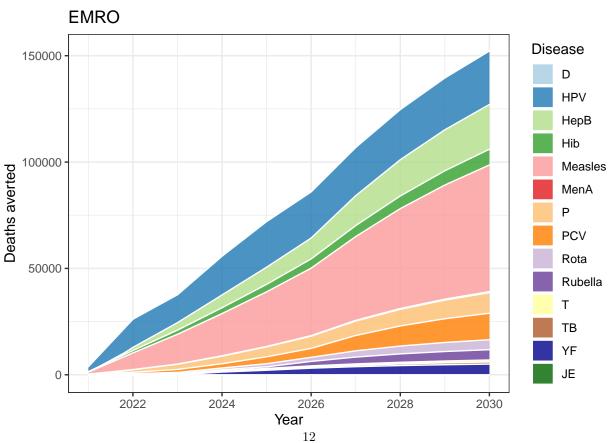


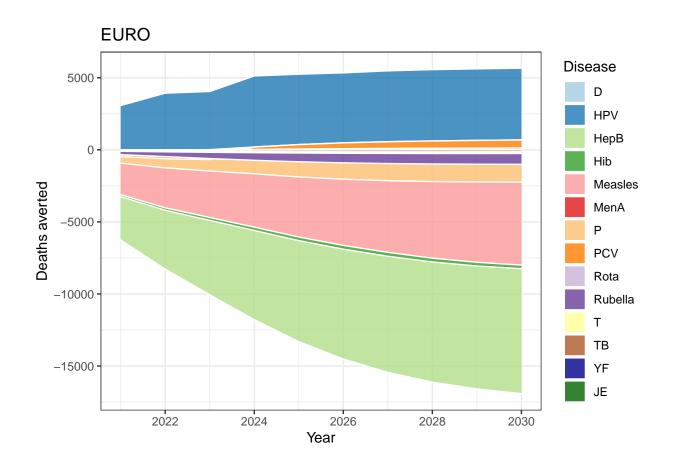
disease	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
$\overline{\mathrm{D}}$	64.932175	244.1733	403.3035	550.0973	690.1845	829.5481	961.5912	1085.165	1198.739	1301.42

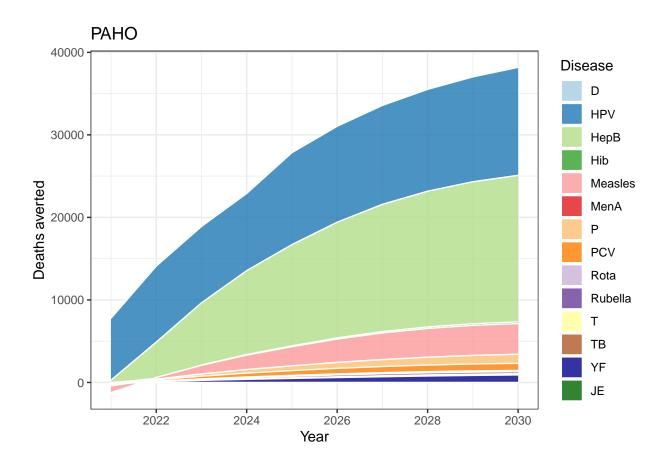
disease	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
P	3484.131365	2421.3961	20713.2184	28564.8143	36116.2735	43485.4613	50563.641	<b>9</b> 57312.11	463675.61	869621.419
PCV	2922.556651	8191.6952	<b>3</b> 5913.2496	49058.0607	59712.4012	68362.1426	80140.493	189322.59	496654.01	l <b>3</b> 102623.994
Rota	694.1578563	8618.8863	7309.9678	10399.0484	13265.2381	15724.3104	30730.181	<b>&amp;</b> 1055.91	848285.53	3453457.457
Rubella	a 230.643022 1	628.9863	2950.0265	4705.6011 6	6704.0519	10256.2125	16644.403	21189.08	<b>2</b> 4452.54	1426814.818
${ m T}$	222.1117928	311.0889	1337.8965	1831.1921 2	2311.7311	2798.5417	3272.6844	3727.317	4152.095	54539.925
TB	1257.1611462	2748.5909	4145.5522	5483.47206	6788.0797	8072.9480 9	9322.6283	10530.30	41687.53	3712788.735
YF	4313.786480	.0279.0497	716044.9122	23883.5767	30744.1718	38035.8435	44472.522	<b>2</b> 50274.04	<b>%</b> 5590.81	1060526.994

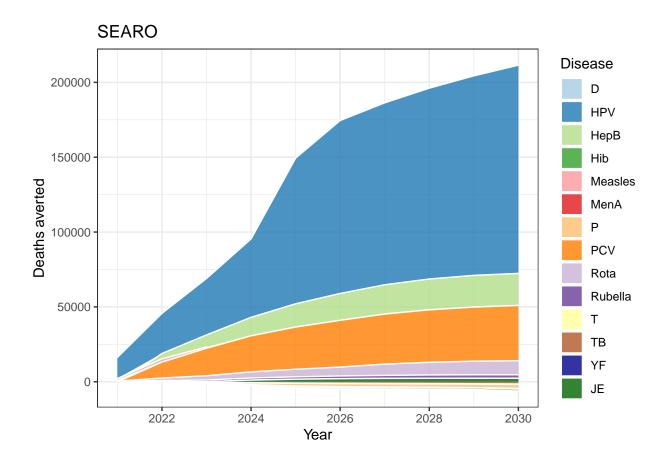
### By disease for each region

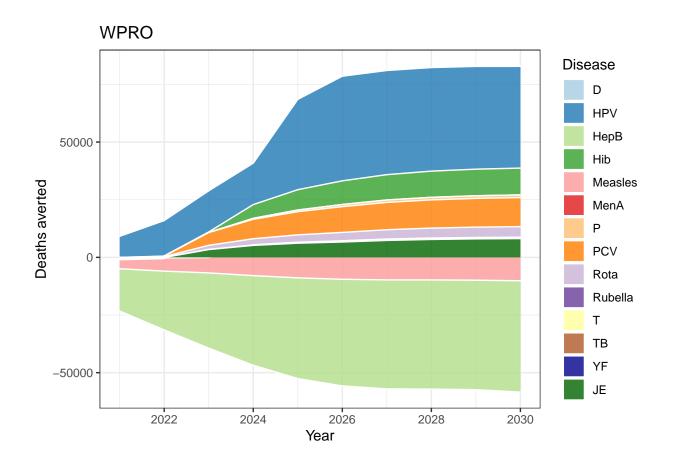




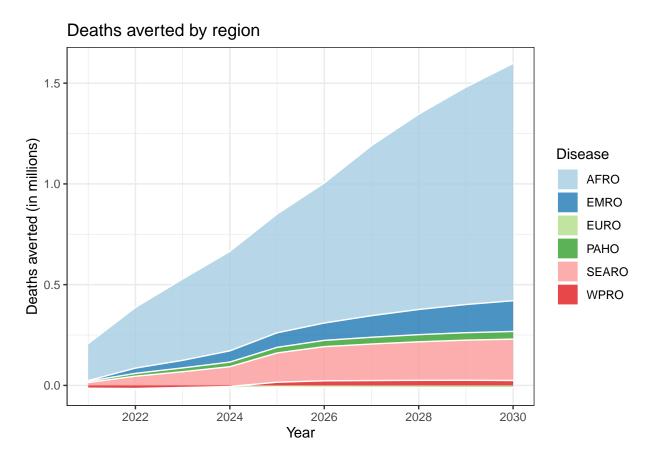






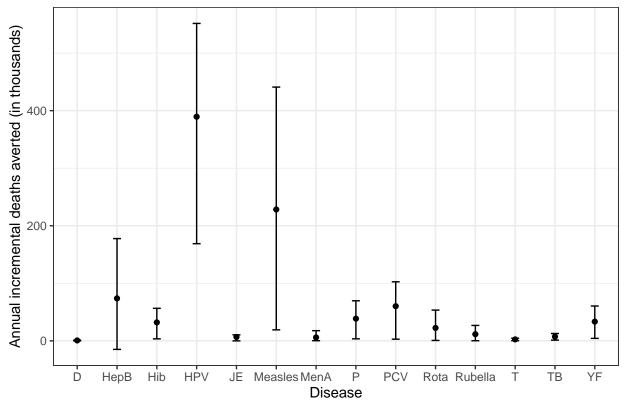


## Incremental by year by region



### By disease mean annual incremental deaths averted with min and max annual

## Mean and range of annual incremental deaths averted by disease



disease	mean	min	max
D	732.9161	64.93217	1301.427
HPV	389492.8501	168849.76464	551569.751
HepB	73817.6262	-14865.69734	177697.995
Hib	32079.6832	3461.01928	56531.960
Measles	228285.5162	19110.16058	440948.036
MenA	5938.9124	248.42265	17693.866
P	38595.8088	3484.13136	69621.419
PCV	60290.1200	2922.55665	102623.994
Rota	22454.0700	694.15786	53457.457
Rubella	11557.6376	230.64302	26814.818
T	2500.4584	222.11179	4539.925
TB	7282.5008	1257.16115	12788.735
YF	33416.5715	4313.78648	60526.994
JE	6672.4742	-37.23190	10478.460
Total	913117.1453	189998.76172	1586594.839