



# The Ethiopian Public Health Institute



## HIV Related Estimats and Projections in Ethiopia for the Year-2019

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## **Foreword**

The importance of countries' "knowing their epidemic "as a prerequisite for success in defeating HIV is widely accepted and clearly recognized worldwide. The Ethiopian Mistry of Health has also adopted an evidence informed approach for advocacy, planning, and budgeting at the National and regional levels for the HIV and AIDS response.

The successful implementation of the HIV prevention and treatment program has shown positive results. This 2019 HIV Estimates Report aims to provide an improved understanding of the HIV epidemic in Ethiopia, and offers important insights into the impact of various interventions.

The estimates has been derived from important data sources such as population demographic data agency, program statistics such as ART data, PMTCT, Viral load data from central statistical agency, ministry of health and EPHI respectively. These program data has been processed using spectrum model version number 5.84 by EPHI team in consultation and review with key stakeholders from the Federal HIV/AIDS Prevention and Control Office (HAPCO), Ethiopian Ministry of Health, UNAIDS, WHO and other national and international organizations.

The highlights of this report includes a gradual decline in adult HIV new infection to an estimated 13,394 for the year 2016 to 11,613 in 2019. It is with pleasure that we communicate the 2019 Ethiopia HIV Estimates Report; a product of hard work, resilience, and renewed commitment to ending AIDS. The 2019 Ethiopia HIV Estimation Report seeks to provide insight into the HIV epidemic in Ethiopia, and offers critical input into the impact of key interventions.

## Acknowledgement

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**HIV and AIDS Estimates**

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower bound</b>	<b>Upper bound</b>
Total	669,236	507,779	858,548
Male	255,689	191,989	329,881
Female	413,547	314,869	529,396
Total	14,843	8,594	25,642
Male	6,013	3,488	10,416
Female	8,830	5,074	15,180
<b>Annual AIDS deaths (all ages)</b>			
Total	11,546	6,988	19,685
Male	4,976	3,108	8,345
Female	6,570	3,865	11,440
<b>Adults living with HIV (aged 15+)</b>			
Total	625,007	477,609	796,575
Male	233,211	177,255	299,895
Female	391,796	300,095	499,825
HIV Prevalence	1.06%	0.81%	1.36%
<b>Adults with New HIV infections (15+)</b>			
Total	11,613	6,541	20,436
Male	4,368	2,461	7,809
Female	7,245	4,088	12,579
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	9,491	5,755	16,483
Male	3,922	2,483	6,755
Female	5,569	3,239	9,848
<b>Children with HIV (aged 0-14)</b>			
Total	44,229	29,743	63,227
Male	22,478	15,120	32,114
Female	21,751	14,621	31,111
<b>New HIV infections (aged 0-14)</b>			
Total	3,229	1,834	5,479
Male	1,644	934	2,790
Female	1,585	900	2,689
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	2,055	1,073	3,449
Male	1,054	552	1,767
Female	1,001	521	1,683
<b>PMTCT summary</b>			
Mothers needing PMTCT	19,110	10,653	32,355
Mothers Receiving PMTCT	14,149		
PMTCT coverage	74.04%	41.27%	125.4%
Final transmission rate	16.90%	9.42%	28.61%

**HIV AND AIDS ESTIMATES**

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower bound</b>	<b>Upper bound</b>
Total	115,679	90,108	140,453
Male	45,686	35,287	56,335
Female	69,994	54,896	85,057
<b>New HIV infections (all ages)</b>			
Total	1,119	606	1,963
Male	496	263	857
Female	623	335	1,096
<b>Annual AIDS deaths (all ages)</b>			
Total	1,302	953	1,751
Male	630	462	818
Female	672	487	949
<b>Adults living with HIV (aged 15+)</b>			
Total	111,608	87,607	135,310
Male	43,609	33,893	53,638
Female	67,999	53,550	82,485
HIV Prevalence	3.76%	2.99%	4.54%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	918	469	1,607
Male	394	204	698
Female	524	271	929
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	1,192	872	1,601
Male	572	416	746
Female	620	451	882
<b>Children with HIV (aged 0-14)</b>			
Total	4,072	2,782	5,614
Male	2,077	1,419	2,863
Female	1,995	1,364	2,751
<b>New HIV infections (aged 0-14)</b>			
Total	200	128	316
Male	102	65	161
Female	98	63	155
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	111	74	158
Male	58	39	82
Female	53	35	74
<b>PMTCT summary</b>			
Mothers needing PMTCT	2,352	1,484	3,858
Mothers Receiving PMTCT	2,307		
PMTCT coverage	98.08%	61.89%	160.88%
Final transmission rate	8.53%	5.39%	14.00%

## HIV and AIDS Estimates

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower bound</b>	<b>Upper bound</b>
Total	13,306	10,210	17,016
Male	5,677	4,374	7,201
Female	7,629	5,845	9,744
<b>New HIV infections (all ages)</b>			
Total	461	292	689
Male	207	128	324
Female	255	164	381
<b>Annual AIDS deaths (all ages)</b>			
Total	537	346	767
Male	276	180	404
Female	261	167	381
<b>Adults living with HIV (age 15+)</b>			
Total	12,082	9,352	15,368
Male	5,056	3,965	6,387
Female	7,025	5,409	8,966
HIV Prevalence	1.06%	0.82%	1.34%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	396	248	595
Male	173	103	278
Female	222	143	335
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	457	290	672
Male	235	149	357
Female	222	141	333
<b>Children with HIV (aged 0-14)</b>			
Total	1,224	847	1,663
Male	620	429	843
Female	604	418	820
<b>New HIV infections (aged 0-14)</b>			
Total	65	43	92
Male	33	22	47
Female	32	21	45
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	79	52	109
Male	40	27	55
Female	39	26	54
<b>PMTCT summary</b>			
Mothers needing PMTCT	526	319	794
Mothers Receiving PMTCT	524		
PMTCT coverage	99.66%	60.43%	150.43%
Final transmission rate	12.45%	7.55%	18.80%

**HIV AND AIDS ESTIMATES**

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower bound</b>	<b>Upper bound</b>
Total	208,001	158,953	257,456
Male	83,142	63,216	103,073
Female	124,859	95,863	155,874
<b>New HIV infections (all ages)</b>			
Total	4,799	3,070	7,456
Male	2,068	1,319	3,244
Female	2,731	1,745	4,198
<b>Annual AIDS deaths (all ages)</b>			
Total	3,162	2,025	5,233
Male	1,682	1,098	2,728
Female	1,479	941	2,456
<b>Adults living with HIV (aged 15+)</b>			
Total	195,073	151,221	239,958
Male	76,575	58,930	93,720
Female	118,498	91,396	146,447
HIV Prevalence	1.42%	1.10%	1.74%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	3,917	2,401	6,177
Male	1,619	1,002	2,596
Female	2,298	1,451	3,583
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	2,570	1,628	4,354
Male	1,379	915	2,361
Female	1,191	723	2,027
<b>Children with HIV (aged 0-14)</b>			
Total	12,927	8,449	18,059
Male	6,566	4,294	9,172
Female	6,361	4,159	8,896
<b>New HIV infections (aged 0-14)</b>			
Total	882	602	1,316
Male	449	307	670
Female	433	295	646
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	592	326	903
Male	303	167	462
Female	289	158	440
<b>PMTCT summary</b>			
Mothers needing PMTCT	5,736	3,648	9,315
Mothers Receiving PMTCT	4,490		
PMTCT coverage	78.28%	49.78%	127.11%
Final transmission rate	15.38%	9.78%	24.97%

## HIV and AIDS Estimates

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower</b>	<b>Upper bound</b>
Total	6,786	5,047	9,476
Male	2,602	1,925	3,633
Female	4,184	3,086	5,854
<b>New HIV infections (all ages)</b>			
Total	223	130	414
Male	93	54	169
Female	130	76	245
<b>Annual AIDS deaths (all ages)</b>			
Total	115	73	214
Male	54	34	95
Female	61	40	119
<b>Adults living with HIV (aged 15+)</b>			
Total	6,186	4,630	8,577
Male	2,299	1,720	3,173
Female	3,887	2,889	5,398
HIV Prevalence	0.91%	0.68%	1.27%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	165	95	305
Male	63	36	117
Female	102	59	193
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	79	52	149
Male	35	24	62
Female	44	29	85
<b>Children with HIV (aged 0-14)</b>			
Total	600	405	950
Male	303	205	480
Female	297	200	470
<b>New HIV infections (aged 0-14)</b>			
Total	59	35	98
Male	30	18	50
Female	29	17	48
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	36	18	63
Male	18	9	32
Female	18	9	31
<b>PMTCT summary</b>			
Mothers needing PMTCT	271	149	511
Mothers Receiving PMTCT	146		
PMTCT coverage	53.96%	29.65%	101.84%
Final transmission rate	21.48%	11.80%	40.53%

**HIV AND AIDS ESTIMATES**

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower</b>	<b>Upper bound</b>
Total	11,556	8,764	14,750
Male	4,735	3,645	6,144
Female	6,821	5,212	8,666
<b>New HIV infections (all ages)</b>			
Total	306	174	523
Male	141	81	236
Female	165	93	276
<b>Annual AIDS deaths (all ages)</b>			
Total	229	133	386
Male	137	80	223
Female	92	53	166
<b>Adults living with HIV (aged 15+)</b>			
Total	11,111	8,462	14,172
Male	4,506	3,512	5,852
Female	6,605	5,065	8,385
HIV Prevalence	3.36%	2.60%	4.30%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	270	148	462
Male	122	69	208
Female	148	83	248
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	208	116	364
Male	126	71	211
Female	82	45	155
<b>Children with HIV (aged 0-14)</b>			
Total	446	307	614
Male	229	158	316
Female	217	149	299
<b>New HIV infections (aged 0-14)</b>			
Total	36	23	54
Male	18	12	28
Female	18	11	26
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	21	13	29
Male	11	7	15
Female	10	6	14
<b>PMTCT summary</b>			
Mothers needing PMTCT	195	114	308
Mothers Receiving PMTCT	145		
PMTCT coverage	74.42%	43.38%	117.73%
Final transmission rate	18.44%	10.75%	29.17%

## HIV and AIDS Estimates

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower bound</b>	<b>Upper bound</b>
Total	13,896	10,346	18,806
Male	5,715	4,221	7,937
Female	8,181	6,141	10,973
<b>New HIV infections (all ages)</b>			
Total	459	277	791
Male	197	121	343
Female	262	159	446
<b>Annual AIDS deaths (all ages)</b>			
Total	275	175	432
Male	85	61	124
Female	190	117	312
<b>Adults living with HIV (aged 15+)</b>			
Total	12,753	9,552	17,355
Male	5,136	3,771	7,122
Female	7,617	5,761	10,236
HIV Prevalence	4.37%	3.25%	5.93%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	376	223	662
Male	155	92	278
Female	221	132	382
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	221	139	357
Male	57	41	85
Female	164	99	275
<b>Children with HIV (aged 0-14)</b>			
Total	1,143	788	1,580
Male	579	399	801
Female	564	389	779
<b>New HIV infections (aged 0-14)</b>			
Total	82	56	127
Male	42	28	64
Female	40	27	62
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	55	33	82
Male	28	17	42
Female	27	16	40
<b>PMTCT summary</b>			
Mothers needing PMTCT	472	292	797
Mothers Receiving PMTCT	354		
PMTCT coverage	74.96%	46.29%	126.45%
Final transmission rate	17.40%	10.75%	29.36%

## HIV and AIDS Estimates

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower bound</b>	<b>Upper bound</b>
Total	5,521	4,181	7,190
Male	2,152	1,612	2,813
Female	3,369	2,560	4,358
<b>New HIV infections (all ages)</b>			
Total	136	68	287
Male	56	28	123
Female	80	40	167
<b>Annual AIDS deaths (all ages)</b>			
Total	46	33	68
Male	23	16	36
Female	23	17	33
<b>Adults living with HIV (aged 15+)</b>			
Total	5,258	3,986	6,833
Male	2,018	1,528	2,643
Female	3,240	2,474	4,203
HIV Prevalence	3.11%	2.39%	3.97%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	118	57	255
Male	47	22	108
Female	71	35	151
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	38	29	53
Male	19	14	30
Female	19	15	27
<b>Children with HIV (aged 0-14)</b>			
Total	263	178	361
Male	134	91	184
Female	129	87	177
<b>New HIV infections (aged 0-14)</b>			
Total	18	11	31
Male	9	5	16
Female	9	5	15
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	8	3	15
Male	4	2	8
Female	4	2	7
<b>PMTCT summary</b>			
Mothers needing PMTCT	120	72	232
Mothers Receiving PMTCT	93		
PMTCT coverage	77.66%	46.43%	150.47%
Final transmission rate	14.66%	8.77%	28.41%

## HIV and AIDS Estimates

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower bound</b>	<b>Upper bound</b>
Total	166,590	127,527	214,065
Male	54,670	41,644	71,492
Female	111,920	85,755	143,484
<b>New HIV infections (all ages)</b>			
Total	3,964	2,011	6,968
Male	1,307	669	2,312
Female	2,657	1,354	4,559
<b>Annual AIDS deaths (all ages)</b>			
Total	3,078	1,853	5,140
Male	916	564	1,527
Female	2,162	1,263	3,632
<b>Adults living with HIV (aged 15+)</b>			
Total	152,767	118,180	197,576
Male	47,647	36,790	62,051
Female	105,120	81,504	135,328
HIV Prevalence	0.73%	0.56%	0.94%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	2,973	1,449	5,349
Male	802	383	1,481
Female	2,171	1,070	3,878
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	2,421	1,454	4,183
Male	580	354	998
Female	1,841	1,087	3,183
<b>Children with HIV (aged 0-14)</b>			
Total	13,823	9,439	19,060
Male	7,023	4,792	9,679
Female	6,800	4,647	9,381
<b>New HIV infections (aged 0-14)</b>			
Total	991	580	1,481
Male	505	295	754
Female	486	285	726
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	657	365	1,049
Male	336	188	536
Female	321	177	513
<b>PMTCT summary</b>			
Mothers needing PMTCT	5,269	2,976	8,683
Mothers Receiving PMTCT	3821		
PMTCT coverage	72.51%	40.96%	119.49%
Final transmission rate	18.81%	10.62%	30.99%

## HIV and AIDS Estimates

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower bound</b>	<b>Upper bound</b>
Total	64,738	47,998	86,235
Male	25,268	18,350	33,411
Female	39,470	29,413	52,547
<b>New HIV infections (all ages)</b>			
Total	1,832	1,092	3,057
Male	776	468	1,301
Female	1,056	641	1,809
<b>Annual AIDS deaths (all ages)</b>			
Total	1,815	867	3,260
Male	683	320	1,276
Female	1,132	556	1,954
<b>Adults living with HIV (aged 15+)</b>			
Total	59,490	44,314	78,959
Male	22,604	16,461	29,780
Female	36,886	27,616	48,612
HIV Prevalence	0.50%	0.37%	0.66%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	1,268	755	2,140
Male	489	296	844
Female	779	467	1,334
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	1,552	737	2,862
Male	548	241	1,046
Female	1,004	489	1,745
<b>Children with HIV (aged 0-14)</b>			
Total	5,248	3,586	7,608
Male	2,664	1,817	3,861
Female	2,584	1,769	3,748
<b>New HIV infections (aged 0-14)</b>			
Total	564	352	864
Male	287	179	440
Female	277	173	424
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	263	136	496
Male	135	70	253
Female	128	66	243
<b>PMTCT summary</b>			
Mothers needing PMTCT	1,977	1,119	3,044
Mothers Receiving PMTCT	616		
PMTCT coverage	31.16%	17.64%	47.98%
Final transmission rate	28.52%	16.14%	43.91%

## HIV and AIDS Estimates

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower bound</b>	<b>Upper bound</b>
Total	6,301	3,397	11,985
Male	2,374	1,266	4,574
Female	3,927	2,122	7,529
<b>New HIV infections (all ages)</b>			
Total	234	84	643
Male	94	33	253
Female	140	51	401
<b>Annual AIDS deaths (all ages)</b>			
Total	309	141	646
Male	128	62	272
Female	181	81	393
<b>Adults living with HIV (aged 15+)</b>			
Total	5,497	2,951	10,507
Male	1,966	1,056	3,761
Female	3,531	1,892	6,768
HIV Prevalence	0.17%	0.09%	0.33%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	154	54	431
Male	53	17	144
Female	101	37	294
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	253	115	542
Male	100	47	219
Female	153	67	337
<b>Children with HIV (aged 0-14)</b>			
Total	803	398	1,579
Male	407	202	801
Female	396	196	778
<b>New HIV infections (aged 0-14)</b>			
Total	80	33	189
Male	41	17	96
Female	39	16	93
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	57	29	105
Male	29	15	53
Female	28	14	51
<b>PMTCT summary</b>			
Mothers needing PMTCT	247	112	554
Mothers Receiving PMTCT	58		
PMTCT coverage	23.50%	10.63%	52.77%
Final transmission rate	32.58%	14.74%	73.15%

## HIV and AIDS Estimates

<b>Peoples living with HIV (all ages)</b>	<b>Estimates</b>	<b>Lower</b>	<b>Upper</b>
Total	56,863	42,217	75,313
Male	23,669	16,939	31,471
Female	33,194	24,666	43,630
<b>New HIV infections (all ages)</b>			
Total	1,309	659	2,522
Male	578	285	1,123
Female	731	370	1,413
<b>Annual AIDS deaths (all ages)</b>			
Total	678	446	1,265
Male	362	238	618
Female	316	202	628
<b>Adults living with HIV (aged 15+)</b>			
Total	53,182	39,287	70,162
Male	21,795	15,729	29,003
Female	31,387	23,515	41,294
HIV Prevalence	1.60%	1.17%	2.12%
<b>Adults with New HIV infections (aged 15+)</b>			
Total	1,057	528	2,075
Male	450	222	894
Female	607	303	1,183
<b>Adults annual AIDS deaths (aged 15+)</b>			
Total	502	331	1,013
Male	272	182	486
Female	230	149	496
<b>Children with HIV (aged 0-14)</b>			
Total	3,681	2,415	5,098
Male	1,874	1,230	2,594
Female	1,807	1,184	2,503
<b>New HIV infections (aged 0-14)</b>			
Total	252	144	403
Male	128	73	205
Female	124	71	197
<b>Annual AIDS deaths (aged 0-14)</b>			
Total	175	93	279
Male	90	48	143
Female	85	45	136
<b>PMTCT summary</b>			
Mothers needing PMTCT	1,945	1,084	3,294
Mothers Receiving PMTCT	1595		
PMTCT coverage	81.99%	45.71%	138.82%
Final transmission rate	12.96%	7.23%	21.95%