

2012 Review: (n = 38)
Rollins et al. Sex Trans Infect
2012

 Years covered: 1990-2012
 → Studies excluded (n = 7)^A

Studies included in final meta-analysis (n = 30)

2015 Review: (n = 49)
Mahy et al. AIDS
2017

 Years covered: 2012-2015
 → Studies excluded (n = 13)^B

Studies included in final meta-analysis (n = 36)

2018 Review: (n = 23)
Stover et al. AIDS
2019

 Years covered: 2015-2018
 → Studies excluded (n = 2)^C

Studies included in final meta-analysis (n = 20)

Previous reviews informed the 2024 review approach
2024 Systematic Review

1 January 2018 to 8 February 2024

Studies from databases/registers (n = 12,588)

 Embase (n=4673)
 PubMed (n=3878)
 CINAHL (n=1311)
 CENTRAL (n=770)
 World Health Organization (WHO) (n=97)
 Unspecified (n=1859)

Duplicates removed (n = 5,858)

Titles and abstracts screened (n = 6,730)

Titles and abstracts excluded (n = 6,306)

Full texts assessed for eligibility (n = 424)

Studies excluded (n = 400)

Primary reason for exclusion:

- Study aggregated heterogeneous groups, primarily on ART use (n=172, 43%)
- Wrong HIV test time, or wrong paediatric age group (n=87, 22%)
- Full text not available (n=56, 14%)
- Wrong study design (n=48, 12%)
- Rate of MTCT not reported (n=32, 8%)
- Birthing persons were co-infected with HIV and another illness (n=5, 1%)

Studies from 2024 review that were extracted and added to the meta-analysis (n = 24)

Total number of studies included in the final 2024 meta-regression (n = 110)
Model 1 (n = 17)
Untreated WLHIV

 Previous review (2018)
 (n = 15)
 Added in 2024
 (n = 2)

Region

 ESA (n = 9)
 WCA (n = 2)
 AP (n = 1)
 WCENA (n = 2)
 MENA (n = 1)
 Multiple regions (n = 2)

Model 2 (n = 58)
Seroconversion and short course PMTCT
 Previous review (2018)

 (n = 53)
 Added in 2024
 (n = 5)

Region

 ESA (n = 41)
 WCA (n = 6)
 LAC (n = 1)
 AP (n = 4)
 WCENA (n = 3)
 Multiple regions (n = 3)

Model 3 (n = 57)
Lifelong ART, perinatal VT
 Previous review (2018)

 (n = 39)
 Added in 2024
 (n = 18)

Region

 ESA (n = 23)
 WCA (n = 2)
 LAC (n = 1)
 AP (n = 5)
 WCENA (n = 23)
 Multiple regions (n = 3)

Model 4 (n = 16)
Lifelong ART, breastfeeding VT
 Previous review (2018)

 (n = 11)
 Added in 2024
 (n = 5)

Region

 ESA (n = 12)
 WCENA (n = 2)
 Multiple regions (n = 2)

VLS (n = 15)
VL at delivery

 Previous review (2018)
 (n = 11)
 Added in 2024
 (n = 4)

Region

 ESA (n = 3)
 AP (n = 1)
 WCENA (n = 11)