INPLASY

Systematic review of HTLV-1 seroprevalence worldwide

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ADMINISTRATIVE INFORMATION

Support - No support.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 29 July 2026 and was last updated on 29 July 2026.

INTRODUCTION

Review question / Objective What is the seroprevalence of HTLV-1 globally in the adult population?

Condition being studied HTLV-1.

METHODS

Search strategy We conducted a systematic literature review of countries with new HTLV-1 prevalence data since the European Centres for Disease Control report of 2015. Studies were included if they contained data relating to adults (≥18 years) within the general population, pregnant women, blood donors, healthy subjects or rural/ indigenous populations. Case reports were excluded as well as studies lacking HTLV confirmatory testing, unless the screening test found no cases of seroreactivity. The Ovid MEDLINE databases including PubMed were searched between 01/09/2014 and 17/02/2023. Abstracts presented at the International Retrovirology Association Conference and the Conference on Retroviruses and Opportunistic Infections were also searched over this time period.

Participant or population Blood donors, pregnant women, general population, healthy subjects, rural/ indigenous populations.

Intervention Not applicable.

Comparator Not applicable.

Study designs to be included All studies presenting seroprevalence data except case reports.

Eligibility criteria HTLV-1 prevalence in one of the adult populations stated above; published between 01/09/2014 and 17/02/2023; must include confirmatory testing unless no cases of HTLV were found in the screening test.

Information sources The Ovid MEDLINE databases including PubMed were searched. Abstracts presented at the International Retrovirology Association Conference and the Conference on Retroviruses and Opportunistic Infections were also searched.

Main outcome(s) HTLV-1 seroprevalence.

Quality assessment / Risk of bias analysis JBI RoB was conducted for all studies providing data, where this data changed the HTLV-1 seroprevalence classification of a country.

Strategy of data synthesis Data were used to assign an HTLV-1 prevalence classification for each country. High prevalence was defined as >1% in the General Population (GP) or Pregnant Women (PW), or >0.01% in First time Blood Donors (FTBD) or Blood Donors (BD). Low prevalence was defined as <1% in GP or PW, or <0.01% in FTBD or BD, or evidence of no HTLV-1 infection. Countries with overall low prevalence with regions of high prevalence were also recognised.

Subgroup analysis Not applicable.

Sensitivity analysis Not applicable.

Language restriction English language only.

Country(ies) involved United Kingdom.

Keywords HTLV-1; seroprevalence; global; worldwide.

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