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Elizabeth Glaser  
Pediatric AIDS  
Foundation



## Catalyzing Pediatric Tuberculosis Innovations (CaP TB): Community Intervention for Tuberculosis Active Contact Tracing and Preventive Therapy study (CONTACT Study)

The Elizabeth Glaser Pediatric AIDS Foundation's CaP TB Project, funded by Unitaid, will introduce and use innovative diagnostics, drugs, and models of care to diagnose and treat pediatric TB and save children's lives. This project will generate and share novel evidence and cost-effectiveness data through a robust research component. CaP TB will conduct a cluster-randomized trial in Cameroon and Uganda. The *Community Intervention for Tuberculosis Active Contact Tracing and Preventive Therapy (CONTACT)* study focuses on how best to reach children who have been exposed to TB and initiate them on preventative therapy (PT) or treatment, if they have active TB. The study will assess whether a community-based model for tracing children exposed to TB and providing community-based screening and initiation on PT, if appropriate, would be more effective than the current facility-based delivery model. The research will evaluate the effect of new interventions and tools on identifying and treating children with TB and the results will address key gaps in the pediatric TB diagnosis, care, and treatment cascade and provide programs with new tools and models of care to better address pediatric TB.

### CONTACT Study

Identifying TB exposure in young children is particularly urgent. Children (and especially children who are HIV-infected or under age 5) are more likely to develop active TB than adults. Contact tracing is a key strategy to identify adults and children who have been exposed to TB. When a person is newly diagnosed with active TB, the World Health Organization recommends screening all household contacts for active TB and offering PT for eligible contacts. Screening leads to early detection and treatment for those with active TB, and together with PT, limits the spread of TB to other contacts. Despite the strong evidence of

effectiveness of these interventions, however, they are rarely implemented in countries facing the highest TB prevalence rates.<sup>1</sup>

The CONTACT Study will compare two models of contact tracing and initiation of PT at facility or community level. The primary focus of the study will be to compare the number and proportion of child contacts screened for TB, initiated on and completing PT between the two models.

### Methodology

The current standard of TB care entails facility-based TB screening and PT given, if needed. When people are newly diagnosed with TB (usually at the TB clinic), they are asked to bring their household contacts, including children, to the facility for TB screening. If no symptoms of active TB are identified, children below age five and HIV-positive children aged 5-14 years are initiated on PT and asked to return for follow-up visits at the facility to ensure adherence and re-screening. If the screening suggests TB is present, further TB investigations are made to confirm the status. If the investigations do not lead to TB diagnosis, the child is initiated on PT. If TB is confirmed, the child will immediately be initiated on a fixed-dose combination treatment, as recommended by the national TB program. Unfortunately, under this model, many TB-exposed children are not brought to the TB facility until they actually develop symptoms of active TB, and thus do not receive TB screening or PT for latent TB.

The proposed intervention entails community-based TB screening and PT model, by using trained community health workers to engage in household contact tracing. When someone is newly diagnosed with TB, facility health workers will ask if clients can be visited at their home

to screen adults and children in their household for TB. If the client gives consent, trained community health workers will visit the households, identify child contacts, and perform TB screening on-site using a symptom-based screening questionnaire. Community health workers will be trained to identify key symptoms suggestive of TB and the critical symptoms that would need immediate referral to facilities. All contacts (adults and children) with suggestive TB symptoms will be immediately referred to the facility for diagnostics. If no TB symptoms are identified through screening, children under age five, or HIV-positive children aged 5-14 years, will be flagged as eligible for PT. The nurse or nearby health clinic nurse will then visit the identified household and initiate the children on PT. The community health worker will conduct regular follow-up visits to assess treatment adherence, as well as presence of any TB symptoms. Compared to the facility-based model, the community-based intervention is expected to screen more children and to link them to PT or treatment.



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*This brief was developed by two project partners, the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) and the French National Research Institute for Sustainable Development (IRD). EGPAF's CaP TB project is funded and supported by Unitaid and aims to improve pediatric TB care and treatment. As part of this approach, EGPAF and IRD are collaborating on a joint research project on the CONTACT study.*

### About EGPAF

*EGPAF is the global leader in the fight against pediatric HIV/ AIDS and has reached nearly 30 million pregnant women with services to prevent transmission of HIV to their babies. With a global footprint spanning support to 19 countries, EGPAF currently supports direct health service delivery in nearly 5,000 sites; advances innovative research; and broadens global advocacy to ensure dramatic, positive change to the lives of millions of women, children, and families worldwide. For more information please contact: [innovation@pedaids.org](mailto:innovation@pedaids.org)*

### About IRD

*The French National Research Institute for Sustainable Development (IRD), an internationally recognized, multidisciplinary organization working primarily in partnership with Mediterranean and inter-tropical countries, is a French public establishment under the joint authority of the French Ministry of Higher Education and Research and the Ministry of Foreign Affairs and International Development. Through its network and presence in nearly 50 countries, it takes an original approach to research, expertise, training and knowledge-sharing, to the benefit of countries and regions that make science and innovation key drivers in their development.*

*For more information please contact: <http://en.ird.fr/the-ird/to-contact-us/to-contact-us>*

### References

1. Hill PC, Rutherford ME, Audas R, et al. Closing the policy-practice gap in the management of child contacts of tuberculosis cases in developing countries. *PLoS medicine* 2011;8:e1001105. doi:10.1371/journal.pmed.1001105



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