

# ANNUAL NATIONAL REPORT

2016-17 Short Report

EMF & Health

Cuba, Research activities

*General research activities in the country related to EMF & population health.*

On regard possible influence of EMF on population Health, new research tasks were conducted during the period by the National Institute for Hygiene, Epidemiology and Microbiology, WHO Collaborating Center for Health in Housing.

## **Research Projects**

Extremely low frequency fields (ELF) in neighborhoods of some electric power stations in urban places of Havana City were monitored on a regular time frame considering coordination with authorities of Environmental Control of the Ministry of Science, Technology and Environment and, the Electric Basic Union (energy provider enterprise). Values over 10 mG – 1  $\mu$ T- in some bedrooms of department buildings near high voltage underground transmission lines were measured.

*ELF/EMF urban sources.*

Magnetic component of ELF/EMF was measured at distances up to 300 m of the power stations and information of field strength was provided to specialists of the Ministry of Basic Industry, Energy and Mines. Field Severity was more intense near high power transformers.

*Possible influence of ELF/EMF on population health in Havana.*

Cross sectional Research: Total cardiovascular risk and exposure to ELF/EMF radiation at residential places began in Havana during current time lapse leads by the National Institute for Hygiene, Epidemiology and Microbiology.

*ELF/EMF in public urban locations.*

Descriptive Research: ELF/EMF magnetic component related to several urban power distribution networks at street levels in some places at Havana City.

Monitoring magnetic component of ELF/EMF 1,5 m above sidewalk places along streets associated to different power distribution systems showed higher intensities where distribution network was underground, followed by aerial distribution areas and finally lesser intensity in mixed distribution at selected places of Havana City.

*Prepared by Dr. Carlos Barceló, Instituto Nacional de Higiene, Epidemiología y Microbiología, Cuba*