

## **FORENSIC RESEARCH PROJECT**

### **RESEARCH PROJECT**

Title	: Physical abuse in children
Keywords	: Children, fractures, abusive head trauma, physical abuse
Forensic Expertise Area	: Forensic Medicine
Department	: Medical research
Institute/Company	: Netherlands Forensic Institute
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Country	: Netherlands
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### **SHORT DESCRIPTION**

Multiple projects on the topic of child abuse are available. There are possibilities for both literature reviews and clinical projects.

Child abuse is a common threat to a child's physical and psychological health. In 2017 the total number of maltreated children in the Netherlands was estimated at 26 to 37 per 1,000 children of whom 7-11% were a victim of physical abuse.

The youngest children face the highest risk. Delay in diagnosing abuse can have major consequences and can be life threatening.

In the department of forensic medicine for children of the Netherlands Forensic Institute there are currently several projects running. Two of them are the following:

**THREAT study:** A Dutch study about fractures in young children under three years old to evaluate incidence, prevalence, locations, types, age distribution, utilization rates of radiological investigations. The overall aim of the study is to evaluate the value of various factors (such as age, mobility, type and location of fractures) to determine which of these factors could be predictive of abuse.

**SHAKE study:** A Dutch study about Abusive Head Trauma (AHT) (previously shaken baby syndrome) in children under 4 years old. Giving an overview of all cases presented to the Netherlands Forensic Institute (approximately 250 cases) and comparing these cases to cases of accidental head injury (such as motor vehicle accidents). The overall aim of the study is to evaluate whether it is possible to determine the age of the intracranial injuries (such as subdural hematoma) by radiological images (CT and MRI) which is important for forensic purposes.

## **REQUIRED/RECOMMENDED EXPERTISE**

Basic knowledge of statistics and SPSS. Anatomy/biology/medicine.

## **REFERENCES**

Alink L, Prevo M, Van Berkel S, et al. Prevalence study on Maltreatment of children and youth (NPM-2017). Leiden University, Institute of Education and Child Studies TNO Child Health 2017

Choudhary AK, Servaes S, Slovis TL, et al. Consensus statement on abusive head trauma in infants and young children. *Pediatric Radiology*, 2018 Aug;48(8):1048-1065

Kemp AM, Dunstan F, Harrison S, et al. Patterns of skeletal fractures in child abuse: systematic review. *BMJ*. 2008 Oct 2;337:a1518

RCPCH. Child protection evidence. Systematic review on fractures. April 2018