

# Adolescence, Migration and Health in Medieval England

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## Introduction

**In the 1500s, around 30,000 of London's inhabitants were young migrant workers and apprentices, but until now, we have lacked the methods to identify them, making them 'archaeologically invisible.'**



**This project, funded by the Leverhulme Trust, addresses several overarching research questions:**

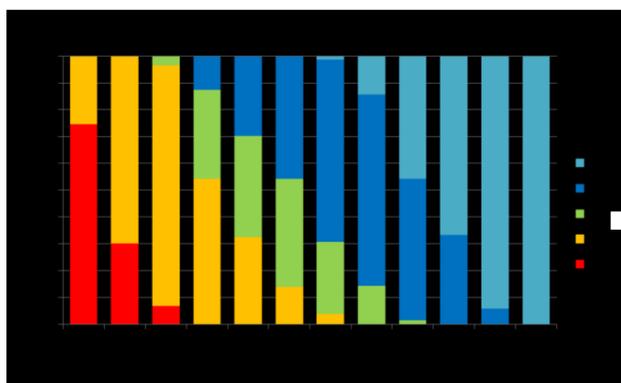
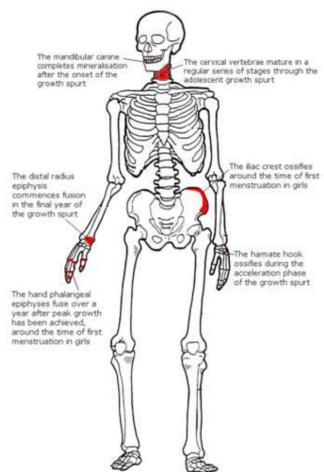
- **What was it like to be a medieval teenager?**
- **At what age and where did children start work?**
- **Did their occupation and lifestyle impact health?**
- **Can we identify teenage migrants in our medieval cities?**

**To help address these questions we are:**

- **Drawing together the skeletal data for thousands of young children and adolescence from across the UK**
- **Developing innovative methods to identify skeletal markers of puberty**
- **Devising new ways of identifying skeletal trauma in the bones of children from archaeological contexts**

## Assessing Pubertal Stage (Fiona Shapland)

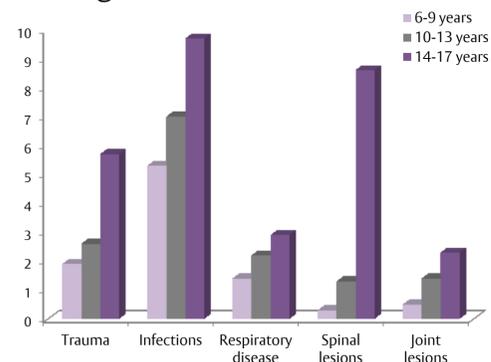
Adolescence marks the transition from childhood to adulthood in modern society and we know from medieval sources that the physical changes of puberty were used to assess suitability for marriage, for example. Until now, puberty has been neglected in bioarchaeology. The dentition, wrist, spine and pelvis have been used to identify different stages of pubertal development and were applied to several large medieval collections.



Results show that although the age of onset of puberty would have been similar to modern standards, the subsequent progress of the growth spurt was considerably slower. Physical changes associated with the later stages of the spurt such as menarche and the breaking of the voice would have been delayed, along with achievement of final stature, fertility and muscular development.

## Health of the Apprentice (Mary Lewis)

Medieval children entered the world of work between 10-16 years of age, with the average age of an apprentice 13.5 years. Migration to towns to find work meant isolation from their family and dependence on an employer and the powerful medieval Guilds. Palaeopathological evidence from 6983 children from 162 urban and rural cemeteries are being analysed to reveal the impact of this life on their health. Preliminary results show higher levels of spinal joint disease, infections and trauma in the urban groups. Indicators of stress to the spine and joints begins to appear in urban children aged 8-10 years, gradually increasing up to 13 years of age. From the ages of 10-12 years, children in the urban areas also begin to show an increase in respiratory infections evident on their ribs and sinuses. By 14 years old, these conditions have increased in number and variety indicating the hazards of a working life in a medieval town.



Lesions on the patella (knee cap) indicative of joint stress in an adolescent from St Oswald's Priory, Gloucester

## Identifying Child Trauma (Petra Verlinden)

Evidence for fractures in children from the archaeological record are scarce, but reveal much about the nature of medieval childhood including: medical care, treatment, and occupational hazards. Using clinical literature, a new palaeopathological method has been created which takes into account the more subtle nature of fractures in the growing skeleton. Partial fractures ('greenstick') and plastic bowing of long bone shafts are often missed, and a re-evaluation of several medieval sites is uncovering valuable new evidence from child trauma in the past.



Suspected bowing deformity in tibia-fibula of a young child (photo: Verlinden).