Age Estimation: Frequently Asked Questions

What is an age estimate?

An age estimate is the chronological age range of an individual determined from the analysis of dental, skeletal and other physical characteristics and compared to relevant standards developed from individuals of known age.

In what circumstances may age estimates be useful?

Living
- Refugees and immigrants
- Individual Identification
- Adoption
- Identity theft
- Fraud
- Missing persons
- Amnesia

Deceased
- Individual Identification
- Disaster Victim Identification
- Biological profiling
- Missing persons
- Differentiation of siblings

What are the broad categories for age?

FOETAL   8 wks - Birth
INFANT   0 - <2 yrs
CHILD   2 - <13 yrs
ADOLESCENT   13 - <18 yrs
ADULT   18+ yrs

Why have I been given an age range?

Biological variability. For example, in a classroom of children many will be different heights but will be the same chronological age. The level of biological development of an individual (their biological age) can be affected by many factors including sex, nutrition, ancestry, disease, medical treatment, socio-economic background and other lifestyle factors. This variability increases with age, so the range of an estimate will be narrower in the young and much wider in adults.

Are there growth differences between males and females?

Yes. Males and females exhibit different rates of growth and development. This difference becomes more obvious as the child gets older.

Are there differences between races and countries?

Yes. Ancestry, or genetic heritage, plays a significant role in an individual's rate of growth and development.

Can you estimate age of an individual from another country?

Yes. Ideally a relevant comparative dataset from the country of origin of the individual will be used for an estimation. If such a dataset does not exist the next most relevant dataset will be used. However, this will result in an estimate with a larger age range allowing for the variation between countries and ancestries.

Are there recommended guidelines for the process of age estimation?

There is a range of techniques available to the practitioner. The choice of the most appropriate technique will depend on the specific circumstances of the case.

What are the limitations of scientific age estimates?

- A small proportion of people will fall outside the estimated range (about 5%);
- Congenital medical conditions can affect the rate of growth of the teeth and bones and can affect the accuracy of an age estimate;
- Nutrition and lifestyle factors may affect the rates of growth and development and can, in some cases, affect the accuracy of an age estimate;
- Estimates are less accurate in adults and more accurate in children;
- We need the appropriate bones and/or teeth to provide an age estimation. The accuracy of age estimations are affected by the completeness and preservation of the remains;
- There is not always the relevant dataset for a particular population, which means a similar (or 'next best') dataset will be used resulting in a less accurate estimate.