

## Why can't cousins participate?

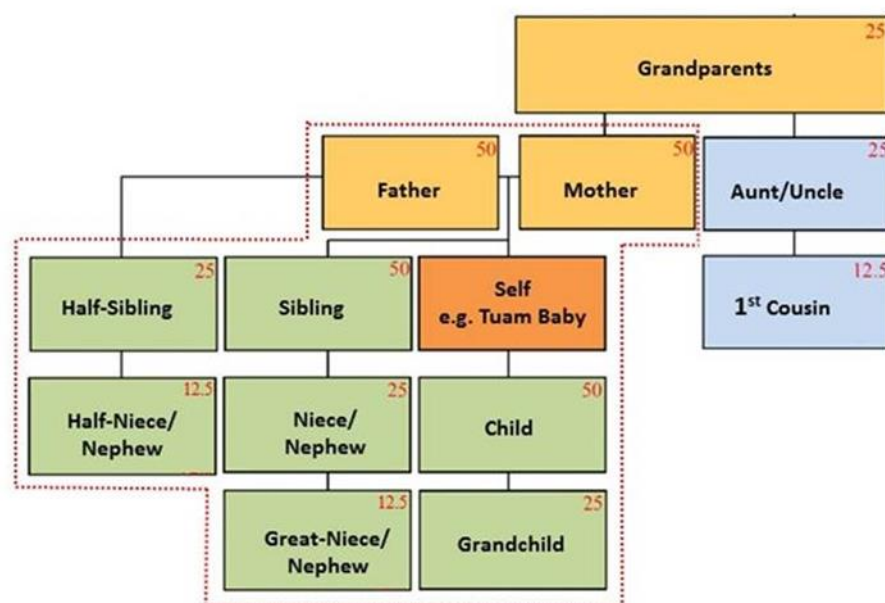
ODAIT operates under the Institutional Burials Act 2022. That legislation was brought forward by the Minister for Children, Equality, Disability, Integration and Youth.

The Minister's Department has informed ODAIT that in developing the list of eligible family members who could participate in an ID programme, the public interest in identifying remains was balanced with the privacy rights of the closest living relatives and had regard to scientific advice (from Forensic Science Ireland).

The list of eligible family members was significantly expanded from what was proposed in the original draft legislation and goes further than was recommended during the pre-legislative scrutiny process. This was possible because provisions were made in the legislation to allow for objections from the most closely related family members. It was also possible on foot of scientific advice that provided a justification for the inclusion of half nieces/nephews and grandnieces/nephews but highlighted challenges with the inclusion of cousins.

On average, half nieces/nephews and grandnieces/nephews share only about 12.5% of DNA with a deceased person (compared to about 25% for second order relatives). However, the scientific advice noted that the variance around this average is relatively limited i.e. the amount of DNA shared is unlikely to be much lower. This is because these relatives descend from the parent. While cousins also share approximately 12.5% of DNA, the common ancestor in these relationships is the grandparent and, therefore, the variation in shared DNA can be much greater. This makes it notably more difficult to draw conclusions about a familial link as, at the lower levels, first cousins will be indistinguishable from more distant relatives.

The diagram below shows the closest bundle of genetic relationships enclosed by a dotted red line:



Further issues arise in the context of the likely low levels of DNA that will be available from remains, due to degradation and the size of the bones involved, as well as the general level of

relatedness in a country like Ireland. These factors increase uncertainty in estimating relationships, particularly relationships, such as cousins, where the variability in shared DNA is greater. The inclusion of relatives with greater variability in shared DNA would increase the risk of incorrect conclusions being drawn in respect of a familial relationship.

These issues do not arise to the same extent in commercial genealogical matching services. Those services compare DNA between living persons where good quantities of non-degraded DNA are available and very few pairs of individuals in the large and global DNA database are likely to be closely related.

It should be noted that the legislation provides that family members, not limited to the participants in an Identification Programme, are provided with regular updates on developments at the site by the Director. In addition, final arrangements for remains that are recovered but not identified will have regard to the wishes of persons who believe they have family members buried at the site.