



## HOW DO YOU EXPLAIN RESULTS WITH MULTIPLE COUNTRIES AND MULTIPLE ETHNIC GROUPS?

Our analysis looks at the frequency of your lineage (how common it is) within an ethnic group and region. Ethnic groups are formed around social and cultural characteristics, not genetic characteristics. So, there are some ethnic groups that are very closely linked (sharing the same genetic lineages) even though they have different dialects, beliefs, practices and religions. So as a result, we often find the same genetic lineage within different groups and regions.

Our database is based on present-day countries in Africa. **Nigeria** and **Cameroon** are neighboring countries whose borders have been politically drawn and changed over time. Therefore, the countries today may have borders that did not exist hundreds of years ago.

**Here is an analogy for how a genetic lineage can be shared by multiple groups in multiple countries.**

You can be a member of a Catholic church. You have a brother who lives 200 miles away in a different city and belongs to a Baptist church. Your grandmother may live 75 miles away in yet a different city and belong to a Mosque. You each belong to a different group, live in a different region, but share the same genetic lineage.

The capital cities of **Nigeria** and **Cameroon** are approximately 450 miles apart. This is roughly the same distance between San Diego and San Francisco.

