

## Mitochondrial Haplogroups – Short Descriptions

A – Haplogroup A originated in Asia about 60,000 years ago and is still prevalent there today. When found in the Americas, haplogroup A is considered to be Native American. The Peruvian mummy known as the Ice Maiden is haplogroup

B – Haplogroup B originated in Asia about 50,000 years ago. As opposed to haplogroup A and the other haplogroups prevalent in Native Americans, haplogroup B is conspicuously absent from the Northern Siberian population, although it is found in other Central and South Asian populations.

C – Haplogroup C developed about 60,000 years ago and is found in Siberia and Northern Asia in addition to the Native American populations. Haplogroup CZ is also found in Eurasian populations.

D – Haplogroup D, developed approximately 60,000 years ago and along with haplogroups A, B, C and X is considered to be Native American. In addition, we find haplogroup D today in Northern and Eastern Asia.

E – Haplogroup E is very rare and elusive. Very little is known. It has been detected in the Malay Peninsula, the Sabah of Borneo, coastal Papua New Guinea as well as sparsely in Taiwan and the Philippines and on some islands. A small concentration is found today in Argentina. A previously identified Columbian group is now believed to be a reverse mutation from haplogroup C.

F – Haplogroup F has descended from haplogroup R in Eastern Asia. Today it is found in China and Japan, but not in the Americas.

G – Haplogroup G is found almost exclusively in Northeast Siberia, in particular among the Koryak and Itelmen people and also among the indigenous inhabitants of Kamchatka.

H – Haplogroup H, including HV and preHV, the most common haplogroup in Europe, is found in nearly 50% of the population. It developed about 20,000 years ago, before the advent of farming, and is thought to have spread along with agriculture. It is also common in the Middle East and Northern Africa. Pre-HV is prevalent in the Middle East, particular in Arabia.

I – Haplogroup I originated approximately 30,000 years ago someplace in Eurasia. Today, it is found in the Mediterranean, the Arabian lands and in Europe. It is thought to have been one of the first haplogroups to inhabit Europe.

J – Haplogroup J originated about 45,000 years ago in or near Mesopotamia and migrated into Europe. Haplogroup J is associated with the spread of farming and herding in Europe. The highest populations are found in the Near East, Europe, Caucasus and North Africa. Subgroups of J are found in Jewish populations.

K – Haplogroup K, part of the super-haplogroup UK, originated approximately 15,000 years ago in Asia and expanded westward into Europe. It first appeared when Europe was repopulated after the end of the last glacial maximum. Descendants today live in Western Europe. Today, nearly 1/3 of the people with Ashkenazi Jewish ancestry belong to haplogroup K.

L – Haplogroup L is the haplogroup most closely associated with mitochondrial Eve, the haplogroup from which all other haplogroups are descended. Haplogroup L1 originated 150,000 years ago in Africa from haplogroup L0 which is extinct, and is currently found in Western and Central Africa. Nearly one third of Africans have haplogroup L2 which developed about 70,000 years ago. Because of its prevalence, it is the most common haplogroup found in African-Americans today. Haplogroup L3 gave rise to haplogroups M and N from which all of the world's non-African population descends.

M – Haplogroup M descended from haplogroup L3 about 80,000 years ago. Haplogroups M and N were the two haplogroups believed to have migrated from Africa into the rest of the world, and from whom all non-African's are descended to day. Ancestors migrated to Asia about 60,000 years ago, populating Southern Asia. Subgroups of haplogroup M include M subgroups, C, D, E, G and Z.

N – Haplogroup N descended from L3, but originated about the same time as M. Haplogroup N is important because it is the mother haplogroup for most of Europe's haplogroups, as haplogroups R, N1, A, I, W and X are all descendant haplogroups.

R – Haplgroup R is found throughout Asia and Eastern Europe, from the Ural Mountains to Japan. Haplogroup R also spawned haplogroups B, U, F, HV and V.

X - Haplogroup X is found in Europe and Asia, and is believed to have migrated to the Americas about 15,000 years ago, probably across the land bridge that once connected Alaska to Russia. Today haplogroup X is found in small numbers in the Native American population.