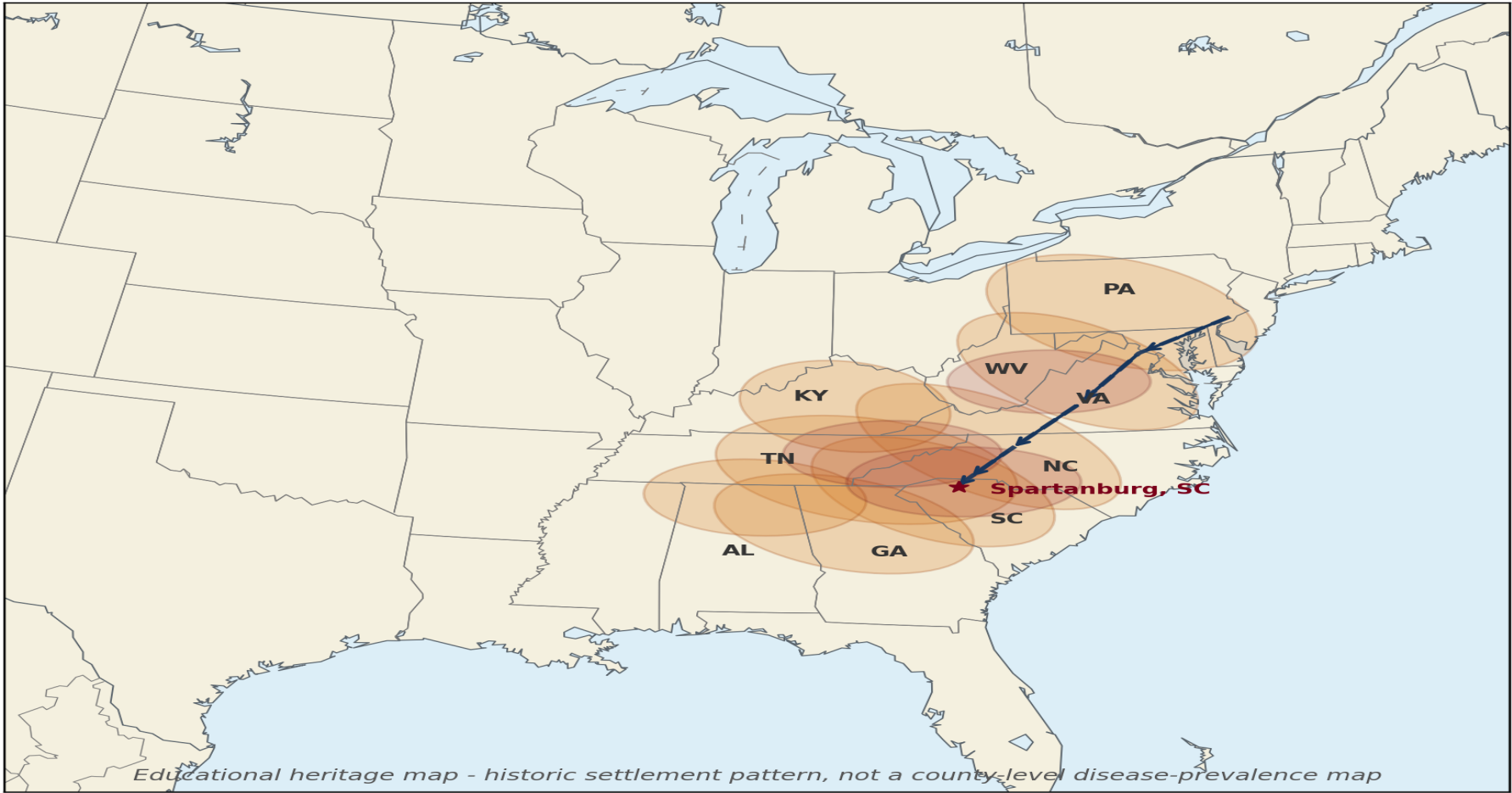


IRON REIGN™

Scots-Irish Settlement and the Northern European Heritage of HFE C282Y

IRON REIGN™ Scots-Irish Settlement & HFE C282Y Heritage Corridor



Orange corridor	Major historic Scots-Irish/Appalachian settlement belt	Dark red emphasis	Core Appalachian/Upper South heritage areas	Blue dashed route	Simplified southward migration path from Pennsylvania through the Shenandoah Valley
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How to Read This Map

This map combines two related historical and genetic ideas without claiming that they are identical. The shaded corridor represents the broad U.S. regions strongly associated with Scots-Irish migration and Appalachian settlement, including Pennsylvania, the Shenandoah Valley, southwestern Virginia, West Virginia, western North Carolina, Upstate South Carolina, East Tennessee, eastern Kentucky, northern Georgia and northern Alabama.

Why It Matters to Iron Reign

HFE-related hereditary hemochromatosis, particularly the C282Y variant, is most strongly associated with Northern European ancestry. Published population-genetics research reports high C282Y frequencies in Ireland, the United Kingdom and other Northern European populations. GeneReviews notes that HFE C282Y homozygosity is most prevalent among populations of European ancestry, and U.S. research in central Alabama found that British Isles and Scottish ancestry were associated with the region's relatively high C282Y frequency.

Important Scientific Qualification

This is an ancestry and migration illustration - not a medical-risk or disease-prevalence map. A person's residence in Appalachia does not establish ancestry, genotype, iron overload or hemochromatosis. Likewise, having Scots-Irish, Scottish or Irish ancestry does not mean a person has HFE-related hemochromatosis. Diagnosis depends on appropriate iron studies, clinical evaluation and, when indicated, genetic testing.

Selected Sources

U.S. Census Bureau, ancestry definitions and American Community Survey ancestry tables; GeneReviews®, *HFE-Related Hemochromatosis*; NIDDK, *Definition & Facts for Hemochromatosis*; Merryweather-Clarke et al., population geography of HFE C282Y/H63D; Lucotte & Dieterlen, European C282Y allele map; Barton et al., ancestry reports and C282Y frequency in central Alabama.

Prepared for the Iron Reign Project

Research • Support • Advocacy

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