

Detection Rates, Pre-Test Carrier Risks, and Post-Test Residual Risks (Sorted by Disorder)

The detection rates and risks set forth below were derived using publicly available information, including gnomAD (<https://gnomad.broadinstitute.org>) and ClinVar (<https://www.ncbi.nlm.nih.gov/clinvar>), and the rates were extrapolated using appropriate scientific methodologies. Published studies were used to derive individual carrier risks for CYP21A2, HBA1/HBA2 and SMN1. As additional clinical evidence is available, the data in these charts may be updated from time to time. These data are provided for general informational purposes only and are not intended as a substitute for professional medical judgment or medical advice.

For unknown or mixed ethnicity, consider using the ethnic background with the most conservative risk estimates.

N/A= Not Available

Disorder	Gene	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
Danon disease	LAMP2	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
D-bifunctional protein deficiency	HSD17B4	African/African American	98	1 in 473	1 in 24,000	1 in 96,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Deafness and hearing loss, nonsyndromic	GJB2	African/African American	99	1 in 63	1 in 6,200	1 in 25,000
		Latino/Admixed American	95	1 in 23	1 in 440	1 in 1,800
		Ashkenazi Jewish	98	1 in 12	1 in 550	1 in 2,200
		East Asian	99	1 in 6	1 in 500	1 in 2,000
		Finnish	99	1 in 16	1 in 1,500	1 in 6,000
		Non-Finnish European/Caucasian	99	1 in 18	1 in 1,700	1 in 6,800
		South Asian	99	1 in 58	1 in 5,700	1 in 23,000
		Other (population not assigned)	99	1 in 20	1 in 1,900	1 in 7,600
		US general population	99	1 in 19	1 in 1,800	1 in 7,200

LOXHD1	African/African American	98	1 in 314	1 in 16,000	1 in 64,000
	Latino/Admixed American	99	1 in 328	1 in 33,000	1 in 130,000
	Ashkenazi Jewish	99	1 in 130	1 in 13,000	1 in 52,000
	East Asian	99	1 in 339	1 in 34,000	1 in 140,000
	Finnish	99	1 in 301	1 in 30,000	1 in 120,000
	Non-Finnish European/Caucasian	99	1 in 152	1 in 15,000	1 in 60,000
	South Asian	99	1 in 334	1 in 33,000	1 in 130,000
	Other (population not assigned)	99	1 in 414	1 in 41,000	1 in 160,000
US general population	99	1 in 191	1 in 19,000	1 in 76,000	
OTOF	African/African American	99	1 in 269	1 in 27,000	1 in 110,000
	Latino/Admixed American	99	1 in 348	1 in 35,000	1 in 140,000
	Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	East Asian	99	1 in 400	1 in 40,000	1 in 160,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	99	1 in 279	1 in 28,000	1 in 110,000
	South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Other (population not assigned)	99	1 in 293	1 in 29,000	1 in 120,000
US general population	99	1 in 295	1 in 29,000	1 in 120,000	
POU3F4	African/African American	99	N/A	N/A	N/A
	Latino/Admixed American	99	N/A	N/A	N/A
	Ashkenazi Jewish	99	N/A	N/A	N/A
	East Asian	99	N/A	N/A	N/A
	Finnish	99	N/A	N/A	N/A
	Non-Finnish European/Caucasian	99	N/A	N/A	N/A
	South Asian	99	N/A	N/A	N/A
	Other (population not assigned)	99	N/A	N/A	N/A
US general population	99	N/A	N/A	N/A	
SYNE4	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	

Dent disease	<i>CLCN5</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	97	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
	US general population	98	N/A	N/A	N/A	
	<i>OCRL</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
	US general population	99	N/A	N/A	N/A	
Developmental and epileptic encephalopathy	<i>ARX</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
	US general population	99	N/A	N/A	N/A	
	<i>CAD</i>	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 415	1 in 41,000	1 in 160,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	1 in 282	1 in 28,000	1 in 110,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	<i>ITPA</i>	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	

Dihydroliipoamide dehydrogenase deficiency	<i>DLD</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	1 in 57	1 in 5,600	1 in 22,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Dihydropyrimidine dehydrogenase deficiency	<i>DPYD</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 210	1 in 21,000	1 in 84,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	99	1 in 254	1 in 25,000	1 in 100,000
		South Asian	97	1 in 251	1 in 8,300	1 in 33,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 317	1 in 32,000	1 in 130,000
Distal spinal muscular atrophy	<i>PLEKHG5</i>	African/African American	97	1 in 76	1 in 2,500	1 in 10,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 428	1 in 43,000	1 in 170,000
		US general population	98	1 in 358	1 in 18,000	1 in 72,000
Donnai-Barrow syndrome	<i>LRP2</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
Dystrophic epidermolysis bullosa	<i>COL7A1</i>	African/African American	99	1 in 254	1 in 25,000	1 in 100,000
		Latino/Admixed American	99	1 in 203	1 in 20,000	1 in 80,000
		Ashkenazi Jewish	98	1 in 193	1 in 9,600	1 in 38,000
		East Asian	98	1 in 356	1 in 18,000	1 in 72,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 163	1 in 16,000	1 in 64,000
		South Asian	99	1 in 256	1 in 26,000	1 in 100,000
		Other (population not assigned)	98	1 in 253	1 in 13,000	1 in 52,000
		US general population	99	1 in 184	1 in 18,000	1 in 72,000

Dystrophinopathies, including Duchenne and Becker muscular dystrophy and X-linked cardiomyopathy	<i>DMD</i>	African/African American	Pending	N/A	N/A	N/A
		Latino/Admixed American	Pending	N/A	N/A	N/A
		Ashkenazi Jewish	Pending	N/A	N/A	N/A
		East Asian	Pending	N/A	N/A	N/A
		Finnish	Pending	N/A	N/A	N/A
		Non-Finnish European/Caucasian	Pending	N/A	N/A	N/A
		South Asian	Pending	N/A	N/A	N/A
		Other (population not assigned)	Pending	N/A	N/A	N/A
		US general population	Pending	N/A	N/A	N/A
Ehlers Danlos syndrome, ADAMTS2-related	<i>ADAMTS2</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 168	1 in 17,000	1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/Caucasian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
Ehlers–Danlos-like syndrome	<i>TNXB</i>	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
Ellis-van Creveld syndrome	<i>EVC2</i>	African/African American	99	1 in 267	1 in 27,000	1 in 110,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	1 in 297	1 in 30,000	1 in 120,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	1 in 318	1 in 11,000	1 in 44,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	1 in 422	1 in 42,000	1 in 170,000
		US general population	99	1 in 471	1 in 47,000	1 in 190,000
Emery-Dreifuss muscular dystrophy	<i>EMD</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A

	<i>FHL1</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
Ethylmalonic encephalopathy	<i>ETHE1</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Fabry disease	<i>GLA</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
Factor IX deficiency (hemophilia B)	<i>F9</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
Familial dysautonomia	<i>ELP1</i>	African/African American	99	1 in 434	1 in 43,000	1 in 170,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	1 in 37	1 in 3,600	1 in 14,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 343	1 in 34,000	1 in 140,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Familial hemophagocytic lymphohistiocytosis	<i>PRF1</i>	African/African American	97	1 in 127	1 in 4,200	1 in 17,000
		Latino/Admixed American	99	1 in 373	1 in 37,000	1 in 150,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	1 in 499	1 in 50,000	1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	1 in 364	1 in 36,000	1 in 140,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	98	1 in 399	1 in 20,000	1 in 80,000	
	<i>STX11</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
	<i>STXBP2</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	1 in 368	1 in 12,000	1 in 48,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 415	1 in 41,000	1 in 160,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	<i>UNC13D</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	1 in 293	1 in 15,000	1 in 60,000
		South Asian	99	1 in 471	1 in 47,000	1 in 190,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	98	1 in 383	1 in 19,000	1 in 76,000		
Familial hyperinsulinism	<i>ABCC8</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 74	1 in 7,300	1 in 29,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	1 in 224	1 in 22,000	1 in 88,000
		Non-Finnish European/Caucasian	99	1 in 297	1 in 30,000	1 in 120,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 491	1 in 49,000	1 in 200,000
		US general population	99	1 in 362	1 in 36,000	1 in 140,000

Familial Mediterranean fever	MEFV	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	1 in 116	1 in 12,000	1 in 48,000
		Ashkenazi Jewish	99	1 in 10	1 in 900	1 in 3,600
		East Asian	99	1 in 192	1 in 19,000	1 in 76,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 127	1 in 13,000	1 in 52,000
		South Asian	99	1 in 379	1 in 38,000	1 in 150,000
		Other (population not assigned)	99	1 in 56	1 in 5,500	1 in 22,000
		US general population	99	1 in 137	1 in 14,000	1 in 56,000
Fanconi anemia	BRIP1	African/African American	98	1 in 391	1 in 20,000	1 in 80,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	98	1 in 198	1 in 9,900	1 in 40,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	1 in 340	1 in 17,000	1 in 68,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	98	1 in 392	1 in 20,000	1 in 80,000
	FANCA	African/African American	99	1 in 185	1 in 18,000	1 in 72,000
		Latino/Admixed American	99	1 in 319	1 in 32,000	1 in 130,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	1 in 246	1 in 12,000	1 in 48,000
		Finnish	99	1 in 308	1 in 31,000	1 in 120,000
		Non-Finnish European/Caucasian	99	1 in 174	1 in 17,000	1 in 68,000
		South Asian	99	1 in 306	1 in 31,000	1 in 120,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 198	1 in 20,000	1 in 80,000
	FANCB	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
	FANCC	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	1 in 80	1 in 7,900	1 in 32,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	98	1 in 470	1 in 23,000	1 in 92,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

FANCD2	African/African American	99	1 in 235	1 in 23,000	1 in 92,000
	Latino/Admixed American	99	1 in 385	1 in 38,000	1 in 150,000
	Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Other (population not assigned)	99	1 in 399	1 in 40,000	1 in 160,000
US general population	99	1 in 441	1 in 44,000	1 in 180,000	
FANCE	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Ashkenazi Jewish	99	1 in 469	1 in 47,000	1 in 190,000
	East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
FANCF	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Non-Finnish European/Caucasian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000	
FANCG	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
FANCI	African/African American	98	1 in 358	1 in 18,000	1 in 72,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Finnish	98	1 in 116	1 in 5,800	1 in 23,000
	Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	South Asian	98	1 in 382	1 in 19,000	1 in 76,000
	Other (population not assigned)	98	1 in 468	1 in 23,000	1 in 92,000
US general population	98	1 in 479	1 in 24,000	1 in 96,000	

	FANCL	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000	
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000	
		Non-Finnish European/Caucasian	98	1 in 391	1 in 20,000	1 in 80,000	
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
		US general population	98	1 in 479	1 in 24,000	1 in 96,000	
Fraser syndrome	FRAS1	African/African American	98	1 in 390	1 in 19,000	1 in 76,000	
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Non-Finnish European/Caucasian	99	1 in 491	1 in 49,000	1 in 200,000	
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	FREM2	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Non-Finnish European/Caucasian	98	1 in 393	1 in 20,000	1 in 80,000	
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000	
		US general population	98	1 in 490	1 in 24,000	1 in 96,000	
	GRIP1	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000	
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	Fucosidosis	FUCA1	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
			Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
			Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
Finnish			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
Non-Finnish European/Caucasian			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
South Asian			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
Other (population not assigned)			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
US general population			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	

Galactosemia	<i>GALE</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 415	1 in 41,000	1 in 160,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	<i>GALK1</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	1 in 446	1 in 45,000	1 in 180,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	<i>GALT (classic)</i>	African/African American	98	1 in 98	1 in 9,700	1 in 39,000
		Latino/Admixed American	97	1 in 222	1 in 22,000	1 in 88,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	1 in 421	1 in 42,000	1 in 170,000
		Finnish	97	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	97	1 in 131	1 in 13,000	1 in 52,000
		South Asian	99	1 in 383	1 in 38,000	1 in 150,000
		Other (population not assigned)	97	1 in 264	1 in 26,000	1 in 100,000
		US general population	97	1 in 143	1 in 14,000	1 in 56,000
	Galactosialidosis	<i>CTSA</i>	African/African American	97	1 in 76	1 in 2,500
Latino/Admixed American			97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
Ashkenazi Jewish			97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
East Asian			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish			97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
Non-Finnish European/Caucasian			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
South Asian			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Other (population not assigned)			97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
US general population			97	1 in 455	1 in 15,000	1 in 60,000
Gaucher disease	<i>GBA</i>	African/African American	87	1 in 172	1 in 1,300	1 in 5,200
		Latino/Admixed American	87	1 in 152	1 in 1,200	1 in 4,800
		Ashkenazi Jewish	87	1 in 15	1 in 110	1 in 440
		East Asian	87	1 in 235	1 in 1,800	1 in 7,200
		Finnish	87	1 in 132	1 in 1,000	1 in 4,000
		Non-Finnish European/Caucasian	87	1 in 109	1 in 830	1 in 3,300
		South Asian	87	1 in 279	1 in 2,100	1 in 8,400
		Other (population not assigned)	87	1 in 91	1 in 690	1 in 2,800
		US general population	87	1 in 124	1 in 950	1 in 3,800

Glutaric acidemia type I	<i>GCDH</i>	African/African American	99	1 in 213	1 in 21,000	1 in 84,000
		Latino/Admixed American	99	1 in 251	1 in 25,000	1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 217	1 in 22,000	1 in 88,000
		Finnish	99	1 in 356	1 in 36,000	1 in 140,000
		Non-Finnish European/Caucasian	99	1 in 204	1 in 20,000	1 in 80,000
		South Asian	99	1 in 289	1 in 29,000	1 in 120,000
		Other (population not assigned)	99	1 in 283	1 in 28,000	1 in 110,000
US general population	99	1 in 215	1 in 21,000	1 in 84,000		
Glutaric acidemia type II	<i>ETFA</i>	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
	<i>ETFB</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	<i>ETFDH</i>	African/African American	99	1 in 361	1 in 36,000	1 in 140,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 133	1 in 13,000	1 in 52,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 411	1 in 41,000	1 in 160,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	99	1 in 421	1 in 42,000	1 in 170,000	
	Glutathione synthetase deficiency	<i>GSS</i>	African/African American	98	< 1 in 500	< 1 in 25,000
Latino/Admixed American			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian			98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
Finnish			97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
Non-Finnish European/Caucasian			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
South Asian			97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
Other (population not assigned)			97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
US general population			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Glycine encephalopathy	<i>AMT</i>	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	<i>GLDC</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	1 in 247	1 in 25,000	1 in 100,000
		Non-Finnish European/Caucasian	99	1 in 311	1 in 31,000	1 in 120,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 372	1 in 37,000	1 in 150,000
		US general population	99	1 in 375	1 in 37,000	1 in 150,000
Glycogen storage disease type I	<i>G6PC1</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	1 in 364	1 in 18,000	1 in 72,000
		Ashkenazi Jewish	99	1 in 77	1 in 7,600	1 in 30,000
		East Asian	99	1 in 186	1 in 19,000	1 in 76,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 342	1 in 34,000	1 in 140,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 375	1 in 37,000	1 in 150,000
	<i>SLC37A4</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	1 in 481	1 in 24,000	1 in 96,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
Glycogen storage disease type III	<i>AGL</i>	African/African American	99	1 in 215	1 in 21,000	1 in 84,000
		Latino/Admixed American	98	1 in 446	1 in 22,000	1 in 88,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 260	1 in 26,000	1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	99	1 in 286	1 in 29,000	1 in 120,000

Glycogen storage disease type IV	<i>GBE1</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	1 in 303	1 in 15,000	1 in 60,000
		Ashkenazi Jewish	99	1 in 72	1 in 7,100	1 in 28,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	1 in 374	1 in 37,000	1 in 150,000
		Non-Finnish European/Caucasian	99	1 in 242	1 in 24,000	1 in 96,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 149	1 in 15,000	1 in 60,000
		US general population	99	1 in 279	1 in 28,000	1 in 110,000
Glycogen storage disease type IX	<i>PHKA1</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	98	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
	<i>PHKA2</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
	<i>PHKB</i>	African/African American	98	1 in 433	1 in 22,000	1 in 88,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 478	1 in 48,000	1 in 190,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 399	1 in 40,000	1 in 160,000
		South Asian	99	1 in 309	1 in 31,000	1 in 120,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 427	1 in 43,000	1 in 170,000
	<i>PHKG2</i>	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	97	1 in 356	1 in 12,000	1 in 48,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Glycogen storage disease type V	<i>PYGM</i>	African/African American	99	1 in 220	1 in 22,000	1 in 88,000
		Latino/Admixed American	99	1 in 157	1 in 16,000	1 in 64,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 491	1 in 49,000	1 in 200,000
		Finnish	99	1 in 496	1 in 50,000	1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 128	1 in 13,000	1 in 52,000
		South Asian	98	1 in 490	1 in 24,000	1 in 96,000
		Other (population not assigned)	99	1 in 167	1 in 17,000	1 in 68,000
Glycogen storage disease type VII	<i>PFKM</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	98	1 in 100	1 in 5,000	1 in 20,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
GM1 gangliosidosis and mucopolysaccharidosis type IVB	<i>GLB1</i>	African/African American	99	1 in 334	1 in 33,000	1 in 130,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	1 in 397	1 in 20,000	1 in 80,000
		Finnish	98	1 in 258	1 in 13,000	1 in 52,000
		Non-Finnish European/Caucasian	99	1 in 326	1 in 33,000	1 in 130,000
		South Asian	99	1 in 318	1 in 32,000	1 in 130,000
		Other (population not assigned)	99	1 in 337	1 in 34,000	1 in 140,000
GRACILE syndrome	<i>BCS1L</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	1 in 99	1 in 9,800	1 in 39,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Gyrate atrophy of choroid and retina	<i>OAT</i>	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Hepatic venoocclusive disease with immunodeficiency	<i>SP110</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Hereditary folate malabsorption	<i>SLC46A1</i>	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
Hereditary fructose intolerance	<i>ALDOB</i>	African/African American	99	1 in 324	1 in 32,000	1 in 130,000
		Latino/Admixed American	99	1 in 227	1 in 23,000	1 in 92,000
		Ashkenazi Jewish	99	1 in 137	1 in 14,000	1 in 56,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	1 in 102	1 in 10,000	1 in 40,000
		Non-Finnish European/Caucasian	99	1 in 82	1 in 8,100	1 in 32,000
		South Asian	99	1 in 392	1 in 39,000	1 in 160,000
		Other (population not assigned)	99	1 in 112	1 in 11,000	1 in 44,000
		US general population	99	1 in 111	1 in 11,000	1 in 44,000
Hereditary spastic paraplegia	<i>CYP7B1</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 224	1 in 22,000	1 in 88,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	99	1 in 318	1 in 32,000	1 in 130,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 414	1 in 41,000	1 in 160,000
	<i>SPG11</i>	African/African American	98	1 in 172	1 in 8,600	1 in 34,000
		Latino/Admixed American	97	1 in 390	1 in 13,000	1 in 52,000
		Ashkenazi Jewish	99	1 in 388	1 in 39,000	1 in 160,000
		East Asian	97	1 in 291	1 in 9,700	1 in 39,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	98	1 in 168	1 in 8,400	1 in 34,000
		South Asian	98	1 in 325	1 in 16,000	1 in 64,000
		Other (population not assigned)	97	1 in 365	1 in 12,000	1 in 48,000
		US general population	98	1 in 197	1 in 9,800	1 in 39,000

	SPG21	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	TECPR2	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	1 in 155	1 in 5,100	1 in 20,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
Hermansky-Pudlak syndrome	AP3B1	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	BLOC1S3	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 405	1 in 40,000	1 in 160,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	BLOC1S6	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

DTNBP1	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	97	1 in 489	1 in 16,000	1 in 64,000
	Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	South Asian	98	1 in 450	1 in 22,000	1 in 88,000
	Other (population not assigned)	98	1 in 378	1 in 19,000	1 in 76,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
HPS1	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
HPS3	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	99	1 in 287	1 in 29,000	1 in 120,000
	East Asian	99	1 in 290	1 in 29,000	1 in 120,000
	Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Non-Finnish European/Caucasian	98	1 in 489	1 in 24,000	1 in 96,000
	South Asian	99	1 in 371	1 in 37,000	1 in 150,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
HPS4	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
HPS5	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	97	1 in 252	1 in 8,400	1 in 34,000
	East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	

	<i>HPS6</i>	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
HMG-CoA lyase deficiency	<i>HMGCL</i>	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Holocarboxylase synthetase deficiency	<i>HLCS</i>	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	1 in 361	1 in 36,000	1 in 140,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Homocystinuria	<i>CBS</i>	African/African American	99	1 in 264	1 in 26,000	1 in 100,000
		Latino/Admixed American	99	1 in 210	1 in 21,000	1 in 84,000
		Ashkenazi Jewish	99	1 in 337	1 in 34,000	1 in 140,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	1 in 455	1 in 45,000	1 in 180,000
		Non-Finnish European/Caucasian	99	1 in 142	1 in 14,000	1 in 56,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 211	1 in 21,000	1 in 84,000
		US general population	99	1 in 171	1 in 17,000	1 in 68,000
	<i>MTRR</i>	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	97	1 in 467	1 in 16,000	1 in 64,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

HSD10 disease	<i>HSD17B10</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
Hyaline fibromatosis syndrome	<i>ANTXR2</i>	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	97	1 in 330	1 in 11,000	1 in 44,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/Caucasian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
Hydrolethalus syndrome	<i>HYLS1</i>	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Hyper IgM syndrome, X-linked	<i>CD40LG</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
Hypohidrotic ectodermal dysplasia	<i>EDA</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	97	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	98	N/A	N/A	N/A

Hypomyelination and congenital cataract	FAM126A	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000		
Hypophosphatasia	ALPL	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 271	1 in 27,000	1 in 110,000
		Finnish	99	1 in 30	1 in 2,900	1 in 12,000
		Non-Finnish European/Caucasian	99	1 in 139	1 in 14,000	1 in 56,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 128	1 in 13,000	1 in 52,000
US general population	99	1 in 191	1 in 19,000	1 in 76,000		
Immunodeficiency with hyper IgM syndrome	AICDA	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	1 in 289	1 in 29,000	1 in 120,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	CD40	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
	UNG	African/African American	97	1 in 436	1 in 15,000	1 in 60,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	

Immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome	<i>CDCA7</i>	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	<i>DNMT3B</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	<i>HELLS</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	<i>ZBTB24</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	1 in 493	1 in 49,000	1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Inclusion body myopathy 2	<i>GNE</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 122	1 in 12,000	1 in 48,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 374	1 in 37,000	1 in 150,000
		South Asian	99	1 in 37	1 in 3,600	1 in 14,000
		Other (population not assigned)	99	1 in 220	1 in 22,000	1 in 88,000
		US general population	99	1 in 345	1 in 34,000	1 in 140,000

Intellectual developmental disorder, NONO-related	<i>NONO</i>	African/African American	99	N/A	N/A	N/A	
		Latino/Admixed American	99	N/A	N/A	N/A	
		Ashkenazi Jewish	99	N/A	N/A	N/A	
		East Asian	99	N/A	N/A	N/A	
		Finnish	99	N/A	N/A	N/A	
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A	
		South Asian	99	N/A	N/A	N/A	
		Other (population not assigned)	99	N/A	N/A	N/A	
		US general population	99	N/A	N/A	N/A	
IPEX syndrome	<i>FOXP3</i>	African/African American	99	N/A	N/A	N/A	
		Latino/Admixed American	99	N/A	N/A	N/A	
		Ashkenazi Jewish	99	N/A	N/A	N/A	
		East Asian	99	N/A	N/A	N/A	
		Finnish	99	N/A	N/A	N/A	
		Non-Finnish European/Caucasian	99	N/A	N/A	N/A	
		South Asian	99	N/A	N/A	N/A	
		Other (population not assigned)	99	N/A	N/A	N/A	
		US general population	99	N/A	N/A	N/A	
Isovaleric acidemia	<i>IVD</i>	African/African American	99	1 in 354	1 in 35,000	1 in 140,000	
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Non-Finnish European/Caucasian	99	1 in 273	1 in 27,000	1 in 110,000	
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Other (population not assigned)	99	1 in 349	1 in 35,000	1 in 140,000	
		US general population	99	1 in 325	1 in 32,000	1 in 130,000	
Joubert syndrome and related disorders, including Meckel-Gruber syndrome	<i>AH11</i>	African/African American	98	1 in 408	1 in 20,000	1 in 80,000	
		Latino/Admixed American	99	1 in 439	1 in 44,000	1 in 180,000	
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000	
		East Asian	98	1 in 311	1 in 16,000	1 in 64,000	
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
		Non-Finnish European/Caucasian	99	1 in 304	1 in 30,000	1 in 120,000	
		South Asian	97	1 in 93	1 in 3,100	1 in 12,000	
		Other (population not assigned)	99	1 in 240	1 in 24,000	1 in 96,000	
			US general population	98	1 in 316	1 in 16,000	1 in 64,000
		<i>ARL13B</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Latino/Admixed American		99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	Ashkenazi Jewish		99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	East Asian		98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
	Finnish		98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
	Non-Finnish European/Caucasian		99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	South Asian		98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
Other (population not assigned)	99		< 1 in 500	< 1 in 50,000	< 1 in 200,000		
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	

B9D1	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
B9D2	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
CC2D2A	African/African American	99	1 in 214	1 in 21,000	1 in 84,000
	Latino/Admixed American	98	1 in 328	1 in 16,000	1 in 64,000
	Ashkenazi Jewish	98	1 in 201	1 in 10,000	1 in 40,000
	East Asian	98	1 in 332	1 in 17,000	1 in 68,000
	Finnish	99	1 in 142	1 in 14,000	1 in 56,000
	Non-Finnish European/Caucasian	98	1 in 194	1 in 9,700	1 in 39,000
	South Asian	99	1 in 287	1 in 29,000	1 in 120,000
	Other (population not assigned)	99	1 in 158	1 in 16,000	1 in 64,000
	US general population	98	1 in 215	1 in 11,000	1 in 44,000
CEP104	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	99	1 in 473	1 in 47,000	1 in 190,000
	South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
CPLANE1	African/African American	99	1 in 134	1 in 13,000	1 in 52,000
	Latino/Admixed American	98	1 in 286	1 in 14,000	1 in 56,000
	Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	East Asian	99	1 in 221	1 in 22,000	1 in 88,000
	Finnish	97	1 in 324	1 in 11,000	1 in 44,000
	Non-Finnish European/Caucasian	98	1 in 151	1 in 7,500	1 in 30,000
	South Asian	98	1 in 244	1 in 12,000	1 in 48,000
	Other (population not assigned)	98	1 in 272	1 in 14,000	1 in 56,000
	US general population	98	1 in 168	1 in 8,300	1 in 33,000

INPP5E	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
KIF14	African/African American	98	1 in 420	1 in 21,000	1 in 84,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	South Asian	97	1 in 371	1 in 12,000	1 in 48,000
	Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000	
NPHP1	African/African American	99	1 in 365	1 in 36,000	1 in 140,000
	Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
NPHP3	African/African American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	East Asian	99	1 in 232	1 in 23,000	1 in 92,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	98	1 in 303	1 in 15,000	1 in 60,000
	South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Other (population not assigned)	98	1 in 419	1 in 21,000	1 in 84,000
US general population	98	1 in 357	1 in 18,000	1 in 72,000	
RPGRI1L	African/African American	98	1 in 285	1 in 14,000	1 in 56,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	East Asian	98	1 in 456	1 in 23,000	1 in 92,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	99	1 in 301	1 in 30,000	1 in 120,000
	South Asian	98	1 in 347	1 in 17,000	1 in 68,000
	Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
US general population	99	1 in 347	1 in 35,000	1 in 140,000	

TCTN1	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Non-Finnish European/Caucasian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
TCTN2	African/African American	98	1 in 450	1 in 22,000	1 in 88,000
	Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
TCTN3	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Ashkenazi Jewish	99	1 in 418	1 in 42,000	1 in 170,000
	East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	98	1 in 419	1 in 21,000	1 in 84,000
	South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
TMEM67	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Ashkenazi Jewish	99	1 in 221	1 in 22,000	1 in 88,000
	East Asian	98	1 in 373	1 in 19,000	1 in 76,000
	Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Non-Finnish European/Caucasian	99	1 in 245	1 in 24,000	1 in 96,000
	South Asian	98	1 in 347	1 in 17,000	1 in 68,000
	Other (population not assigned)	99	1 in 270	1 in 27,000	1 in 110,000
	US general population	99	1 in 305	1 in 30,000	1 in 120,000
TMEM138	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
	Non-Finnish European/Caucasian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
	South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

	TMEM216	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 148	1 in 15,000	1 in 60,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000	
	TMEM231	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 412	1 in 41,000	1 in 160,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	TMEM237	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	Junctional epidermolysis bullosa	LAMA3	African/African American	99	< 1 in 500	< 1 in 50,000
Latino/Admixed American			98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
Ashkenazi Jewish			98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
East Asian			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish			98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
Non-Finnish European/Caucasian			98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
South Asian			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Other (population not assigned)			99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population			98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
LAMB3		African/African American	98	1 in 311	1 in 16,000	1 in 64,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/Caucasian	99	1 in 243	1 in 24,000	1 in 96,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 312	1 in 31,000	1 in 120,000

	<i>LAMC2</i>	African/African American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Juvenile hereditary hemochromatosis	<i>HAMP</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
	<i>HJV</i>	African/African American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/Caucasian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
Juvenile retinoschisis, X-linked	<i>RS1</i>	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	98	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	98	N/A	N/A	N/A