

FACT SHEET

Niemann-Pick Disease Type C

Niemann-Pick disease type C (NPC) is a rare, genetic, neurodegenerative disorder that impairs intracellular cholesterol trafficking, leading to progressive neurological decline and premature death.¹



NPC is caused by pathogenic variants in the *NPC1* or *NPC2* genes, which encode proteins essential for lysosomal cholesterol transport



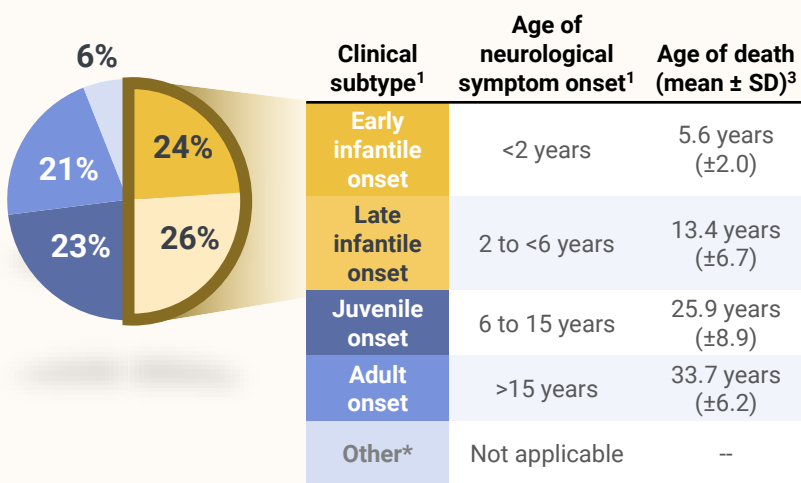
Impaired intracellular cholesterol trafficking results in toxic accumulation of cholesterol in lysosomes and deficiency of cytoplasmic cholesterol needed for normal cellular function



This imbalance leads to neuronal dysfunction, neurodegeneration, progressive neurological decline, and premature mortality

Presentation and disease course are highly heterogeneous. **Age of neurological symptom onset** is the most reliable clinical predictor of disease severity and death, with earlier onset associated with more rapid progression and poorer prognosis. Estimated 50% of individuals with NPC are infantile onset.¹⁻³

Prevalence and prognosis of NPC clinical subtypes²



Recognizing the signs of infantile-onset NPC early enables timely diagnosis and intervention^{1,4}

- History of prolonged neonatal cholestatic jaundice or hepatosplenomegaly
- VSGP
- Ataxia
- Developmental delays

Diagnosis is often delayed. Consider biomarker assays & genetic testing in children showing early signs of infantile-onset NPC.^{1,4}

*Including individuals with neonatal rapidly fatal NPC, without neurological manifestations, or with visceral symptoms only. Data on mean age of death across this group is not available. SD, standard deviation; VSGP, Vertical supranuclear gaze palsy.

- Berry-Kravis E. *Semin Pediatr Neurol.* 2021;37:100879.
- Bolton SC, et al. *Orphanet J Rare Dis.* 2022;17(1):51.
- Imrie J, et al. *BMC Neurol.* 2015;15(1):257.
- Geberhiwot T, et al. *Orphanet J Rare Dis.* 2018;13(1):50.