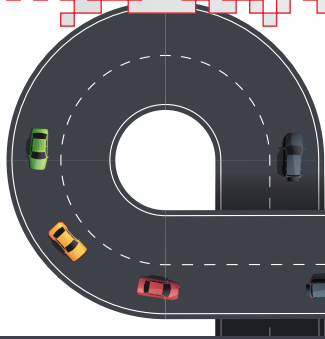
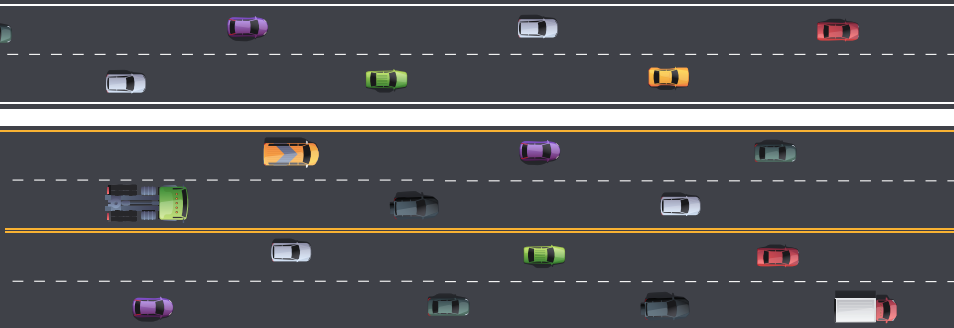


Alzheimer's Disease: A Breakdown of the Brain's Highway Network



THE HEALTHY BRAIN – A THRIVING HIGHWAY SYSTEM

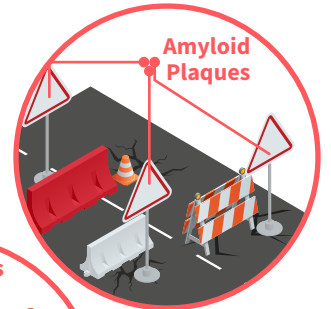
Neurons act as roads that transport information between different areas of the brain. A healthy brain functions without disruption – or roadblocks.



THE ONSET OF ALZHEIMER'S

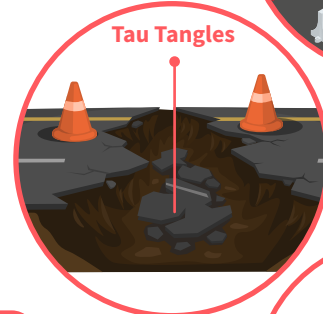
Amyloid Plaques: Roadblocks

Amyloid plaques build up and block communication between neurons, interrupting the smooth flow of information. An individual can have evidence of this amyloid pathology in their blood for some time before they notice symptoms.



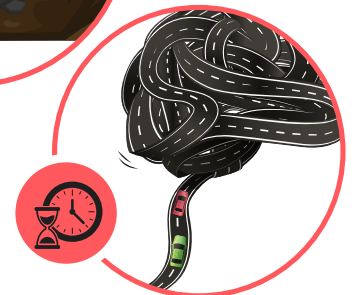
Tau Tangles: Potholes Damaging the Roads

Tau tangles form within neurons, akin to potholes, disrupting the infrastructure further and making it harder for signals to travel. Still, it may take time before an individual experiences cognitive or functional symptoms despite the damage to their brain and its function.



Our Brains' Adapted Routes: Slower and Less Efficient Detours

The brain initially compensates by rerouting signals around the blockages, but these detours are slower and less effective. Meanwhile, the disease can progress largely undetected.



ALZHEIMER'S PROGRESSION – PATHWAYS BECOME IMPASSABLE

As the roadblocks and potholes accumulate, some brain pathways become completely unusable, leading to noticeable cognitive decline. As damage from this fatal disease advances, individuals experience mild cognitive impairment and functional impairment which progressively become more severe.



SCIENCE IS PAVING THE WAY FOR A BRIGHTER FUTURE

Detecting and addressing Alzheimer's early provides patients and families hope.

Advancing science allows for the early detection of Alzheimer's and innovative new treatments are available to help slow disease progression.



We must encourage innovation and pursue early intervention to better fight this fatal disease. Learn more about the fight for Alzheimer's patients at pfcdalz.org.