NRSPP
NATIONAL ROAD SAFETY
PARTNERSHIP
PROGRAM

Microplastics From Tyres

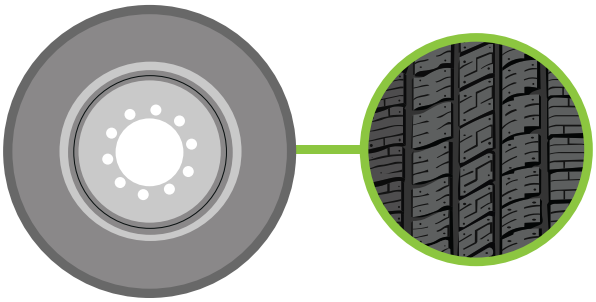
QUICK FACTS

Microplastic pollution

Tyre wear particles are considered the largest source of microplastics in the environment. They are transmitted daily through traffic and are seen as a serious threat to the eco system [2]. In fact, 10–25% of the ocean's microplastics originate from tyres [1].

Tyre Wear Particles (TWP)

Tyre wear particles (TWP) are generated as the tread, the actual wearing part of a tyre, comes into contact with the pavement of our roads.



Heavy Vehicles vs cars

The number of tyres as well as the distance travelled by the different vehicle groups plays a significant role in TWP production.

22 tyres =

approx. 30 000 kms per month — *1 car: approx. 30 000 kms per annum*

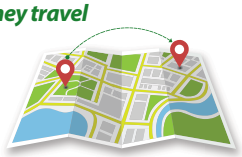
Heavy vehicles are much larger than cars, and have more tyres as well as travelling significantly more distance, so the volume of TWP generated is also a lot larger.

Factors

There are a variety of factors that influence the size and quantity of the TWP that are introduced into the environment [3]:

Climate or temperature | Type of road surface eg. rough | Condition of road surface | Type of tread on the tyre | Driving speed

How they travel



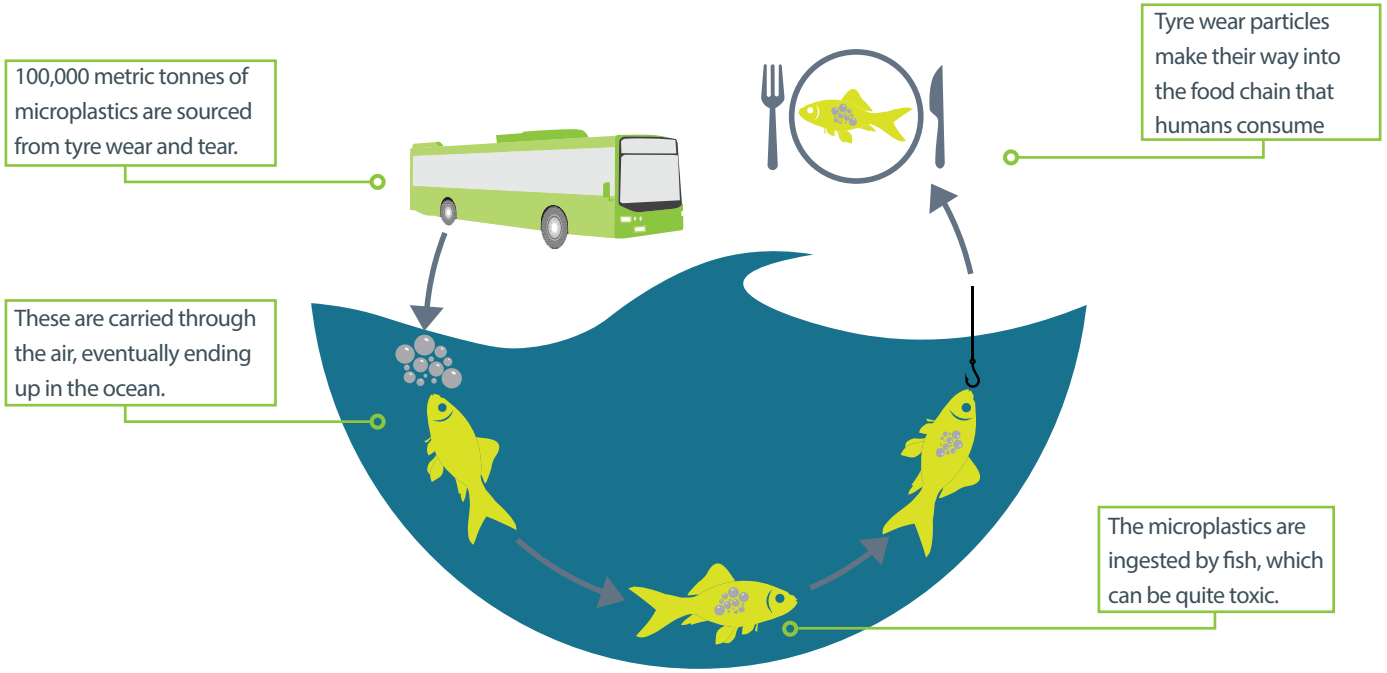
Microplastics from tyres can travel thousands of kilometres from where they were first released.

18–37

The smaller the particle, the further they can spread. The most miniscule microplastics can stay airborne for 18–37 days.

43%
57%

43% of the smaller microplastics from tyres remain on land, 57% will travel into the ocean [1].



Sources: Please refer to accompanying references sheet