

'Make tyre pressure monitoring system mandatory'

KUALA LUMPUR: Tyre blowouts on highways, particularly those involving heavy vehicles, are often linked to excessive loads, poor tyre quality or manufacturing defects — factors that turn routine drives into potential disasters.

Dr Nurrul Hafeezah Sahak from Universiti Kebangsaan Malaysia's Faculty of Science and Technology said these issues, coupled with unbalanced tyre pressure, significantly increased the risk of accidents.

"Exceeding the manufacturer's recommended weight limit puts immense stress on tyres, generating excessive heat and accelerating wear, which raises the chances of a blowout," she told the *New Straits Times*.

She said defective or low-quality tyres, often made with sub-standard rubber, weak sidewalls or faulty tread patterns, were also prone to failure.

"Road conditions also play a role.

"Potholes, uneven surfaces and road debris gradually weaken tyre integrity, especially during long-distance journeys. The same applies to improper tyre pressure.

"Under-inflated tyres create excessive friction, leading to overheating, while over-inflated tyres become rigid and are more susceptible to bursting upon impact with road hazards such as potholes."

Hafeezah said this highlighted the need to make the tyre pressure monitoring system (TPMS) mandatory for heavy vehicles to prevent such issues.

She said TPMS provided real-time monitoring of tyre pressure and temperature, allowing lorry drivers to detect and address any issue before it became a major safety concern.

"The ability to detect deviations in tyre pressure and temperature in real-time enables lorry drivers to take immediate corrective action, reducing the risk

of tyre failure and potential accidents."

Meanwhile, Universiti Putra Malaysia road safety expert Professor Dr Kulanthayan K.C. Mani urged drivers to maintain a safe distance between vehicles, use child seats and check tyres for any sign of abnormality before driving to prevent crashes.

He said while tyre bursting could lead to accidents, maintaining a safe headway — the gap between vehicles — was crucial in preventing collisions or reducing their severity.

"If I drive at 50kph and an emergency happens ahead, I need about 26m to bring my vehicle to a complete stop after braking.

"But at 80kph, I would need around 57m to stop safely.

"On a highway, where speeds are likely around 80kph, the question is whether there was enough distance between vehicles." **By Hakim Mahari**