

# **Workplace Safety and Health (WSH) Guidelines for the Delivery Services Industry**

## **WSH Guidelines for the Delivery Services Industry**

### **Executive Summary**

Delivery companies and intermediaries can improve rider/driver safety by taking the following measures:

#### **Create stronger rider/driver motivation to be safe**

##### **Guideline 1: Provide riders/drivers with feedback on safety behaviour using telematics**

Companies and intermediaries should provide their riders/drivers with feedback on their riding/driving behaviour, through the use of on-board telematics devices or the platform's app, to minimally monitor vehicle speed. The data should be used to engage and advise riders/drivers that show repeated instances of risky behaviour.

##### **Guideline 2: Provide riders/drivers with incentives for safety**

Companies and platforms should implement safety benefit or recognition mechanisms to encourage safe riding/driving behaviour, and counter any inadvertent rushing.

#### **Equip riders/drivers with the knowledge to be safe**

##### **Guideline 3: Facilitate defensive driving/riding training**

Companies and platforms should encourage and provide free defensive driving / riding training for their drivers and riders. It should minimally cover theory on road traffic rules, and practical components on blind spot awareness, braking and balancing techniques.

#### **Reduce exposure to risky situations**

##### **Guideline 4: No penalty for declining heavy loads**

Companies and platforms should allow riders to call for additional riders or to split the load, without any penalty in compensation. If a heavy load cannot be split, companies and platforms should compensate the rider for the time spent in travelling to the pick up location, on a pro-rated basis, even when the rider declines to take the load upon discovery that it is too heavy.

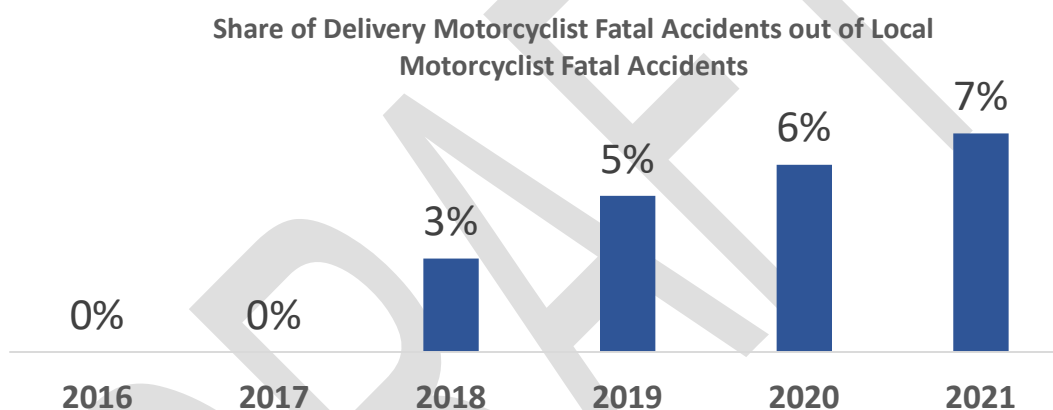
##### **Guideline 5: No bonus or penalty based on delivery time**

Companies and platforms should not set any bonus, penalty, or guideline to deliver within a certain time. To influence end customers to refrain from rushing riders, companies and platforms should also notify customers to expect delivery delays during bad weather and at periods of peak demand.

## 1 Accident Risk Faced by Delivery Riders

Consumers have benefited from greater convenience with the growth in food, grocery, and e-commerce delivery. However, there are safety risks for people involved in delivery work, especially those riding motorcycles, bicycles and Power-Assisted Bicycles (PABs).

This is largely linked to the risks associated with riding two-wheeled vehicles on public roads. With rising demand for delivery in recent years (average annual growth rate of around 6% in delivery rider workforce<sup>1</sup> from 2016 to 2021), the share of delivery riders among fatal motorcycle accident victims has also been rising<sup>2</sup>. In 2021, among the 41 local motorcyclist fatalities, four were delivery riders.



Reducing delivery rider accidents, however, will be challenging. Unlike conventional workplaces like factories or construction sites, where the occupier has strong influence over workplace safety, delivery riders are subjected to external elements, like other road users' actions, which they or their employers or platform intermediaries have limited control over.

To complement the Land Transport Authority (LTA's) ongoing measures to improve safety for all road users, tripartite stakeholders in the delivery industry banded together in a workgroup (see page 8 for composition) to make delivery a safer vocation by reviewing factors they can control. In terms of what riders can do, the WSH Council published the [Guide to Safe Riding on Motorcycles, Bicycles, PABs, PMDs and PMAs](#) in 2018, which was updated in 2021. It advises delivery riders on safety steps they can take, such as keeping a safe distance from vehicles, avoiding their blind spots, and getting enough rest between work shifts.

<sup>1</sup> Source: Ministry of Manpower

<sup>2</sup> Source: Singapore Police Force and Ministry of Manpower. The formula used for the calculation is as follows:  
 $(\text{No. of delivery motorcyclist fatalities} / \text{No. of local motorcyclist fatalities}) \times 100 = \%$

This set of guidelines augment the 2018 Guide to Safe Riding, by recommending what delivery companies and intermediaries should do in terms of their systems and infrastructure to improve safety.

## 2 Guidelines for Delivery Companies and Intermediaries to Prevent Accidents

These guidelines took into account inputs from delivery riders gathered by the National Delivery Champions Association (NDCA)<sup>3</sup>. The riders highlighted that they sometimes rushed to make deliveries to maximise their earnings. This would be especially risky when faced with bad weather conditions, when roads could be slippery, and when handling heavy loads, which could imbalance their two-wheelers.

The guidelines are categorised into three broad factors to address the risks that riders face:

- i) Create stronger rider **motivation to be safe** – this would mitigate any inadvertent temptation among riders to rush
- ii) Equip riders with the **knowledge of how to be safe** – this is because motivation without capability cannot be put into practice; and
- iii) Reduce riders' **exposure to unsafe situations**, such as carrying heavy loads and rushing during bad weather.

While delivery riders (of 2-wheeled vehicles) faced the most acute work-related injury risk, the guidelines include measures that could be applied to delivery drivers (of 4-wheeled vehicles) as well.

## 3 Guidelines

### Create Stronger Rider/Driver Motivation to be Safe

#### 3.1 Guideline 1: Provide riders/drivers with feedback on safety behaviour using telematics

To counter any inadvertent rushing by delivery riders/drivers, they should be given feedback on their driving or riding behaviour. Behaviour can be tracked by on-board telematics devices or by smartphone apps that monitor speed and acceleration/braking parameters. Some delivery companies already attach telematics devices to vehicles or utilise GPS and accelerometer functionality in their mobile apps for this. One company reported a significant reduction in speeding incidents after telematics tracking was implemented. While

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<sup>3</sup> The National Delivery Champions Association (NDCA) is an association which represents self-employed persons whose main source of income are from food or package delivery.

such technology need not provide real-time warnings, the ability of the rider/driver to understand his/her behaviour after-the-fact can be an effective check against risky behaviour.

Delivery companies and intermediaries are encouraged to provide drivers and riders with **feedback on speed at the minimum, through on-board telematics devices or via the delivery intermediaries' app**. It would be ideal if companies and intermediaries have the capability to match speed limits based on location. Otherwise, a flat 50km/h could be set as a reasonable limit<sup>4</sup> for most roads in Singapore. The data should be used to engage and **advise riders/drivers that show repeated instances of risky behaviour**, such as speeding. They could also be encouraged to attend the defensive driving/riding training provided under Guideline 3. For recalcitrant riders or drivers, companies or intermediaries could consider more serious action to protect such workers and other road users, such as suspension.

Some intermediaries have explained that it would require a substantial overhaul of their apps' software in order to provide speed tracking at a meaningful frequency and accuracy, and so they would not be able to attain such capability in the near term. In such cases, intermediaries should encourage their contracted riders to use third-party safety apps (e.g., flare) so that the riders can obtain feedback on their own riding habits on their own.

### 3.2 **Guideline 2: Provide riders/drivers with benefits for safety**

To further encourage safe driving and riding behaviour, delivery companies and intermediaries could **implement safety benefit or recognition mechanisms to acknowledge, encourage and reinforce safe driving and riding behaviour**. Some possible mechanisms include:

- Monetary or non-monetary incentives after a certain number of hours worked, without incurring any road traffic infringement (or without any instance of speeding as tracked by telematics devices or apps, if the company or intermediary has such capability).
- Establishing a ranking list of "safest drivers/riders" under each company or intermediary to provide a sense of achievement for having the best driving/riding behaviour. Evidence of such achievement could also provide a competitive edge in future employment opportunities.
- Safety campaigns or roadshows to raise awareness on safe riding practices.

### **Equip Riders/Drivers with Knowledge of How to be Safe**

#### 3.3 **Guideline 3: Facilitate defensive driving / riding training**

With reference to the WSH Act, both employers and principals should ensure that their employees and contractors (as the case may be) have adequate instruction, information, training and supervision as is necessary to ensure their safety and health at work.

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<sup>4</sup> 50km/h is the default speed limit stipulated in the Road Traffic (Restriction of Speed on Roads) Notification, unless the road falls under the first to sixth schedules of the Notification.

This requirement can be addressed by ensuring that delivery workers are licensed to operate their vehicles, which delivery companies and intermediaries already require. Nonetheless, some workers may have received their license training many years ago, or may not be used to driving and riding at the intensity needed in their delivery work. In addition, delivery riders using bicycles would not have undergone licensing training and may not be familiar with road traffic rules.

Delivery companies and intermediaries should thus **provide defensive driving / riding training** for any driver or rider they employ or who contracts with them or uses their platform, who wants to avail himself or herself to the training. Delivery companies and intermediaries could also encourage their drivers and riders to undergo the training by introducing benefits to be trained, such as eligibility to higher benefit tiers.

The training should be provided free-of-charge to delivery workers, could be done in-house, or through training providers, and should cover the following content in Table 1 below. Refer to **Annex A** for a non-exhaustive list of training providers and their courses.

Table 1: Recommended theory and practical training topics.

Theory	Practical
<ul style="list-style-type: none"> <li>✓ LTA Active Mobility rules compliance</li> <li>✓ Road Traffic Rules</li> <li>✓ Physical well-being</li> </ul> <p>[For Motorcyclists]</p> <ul style="list-style-type: none"> <li>✓ Attributes of a good rider</li> <li>✓ Finer points of riding (posture, eyeline, habit etc.)</li> <li>✓ Identifying potential hazards and applying corrective measures</li> <li>✓ Compensating for the mistakes of other motorists</li> </ul> <p>[For Drivers]</p> <ul style="list-style-type: none"> <li>✓ Common causes of road accidents and their consequences</li> <li>✓ The main cause of driving errors – Decision-Making – driver’s physical and mental conditions</li> <li>✓ Environment and vehicle’s condition</li> </ul>	<p>[For Bicycle users]</p> <ul style="list-style-type: none"> <li>✓ Balancing with a delivery load</li> <li>✓ Stations (Mount/Dismount, Straight &amp; Slow, Hand Signals, E brake etc.)</li> <li>✓ Understanding of vehicle blind spots</li> </ul> <p>[For PAB users]</p> <ul style="list-style-type: none"> <li>✓ Safety checks and maintenance of PAB (brake, wheel, tire, frame etc.)</li> <li>✓ Understanding of vehicle blind spots</li> </ul> <p>[For Motorcyclists]</p> <ul style="list-style-type: none"> <li>✓ Pre-ride check (tyres, chain, sprocket, belting &amp; shaft etc.)</li> <li>✓ Static training</li> <li>✓ Riding postures and balancing techniques</li> <li>✓ Techniques of negotiating a bend</li> <li>✓ Braking techniques</li> <li>✓ Different types of braking techniques</li> <li>✓ Understanding of vehicle blind spots</li> </ul> <p>[For Drivers]</p> <ul style="list-style-type: none"> <li>✓ Experiential Learning – Practical driving along a designated route and observe</li> </ul>

	and learn from other participants' driving
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### **Reduce Riders' Exposure to Unsafe Situations**

#### **3.4 Guideline 4: No penalty for declining excessive loads**

To address riders' concern about handling their vehicle safely with heavy loads, there should be a framework to remove the need for riders to take on heavy loads. Delivery companies and intermediaries already reduce risk of excessive loads by limiting the volume to be delivered to what can fit into riders' delivery bags. However, this does not account for delivery weight. For motorcycles, the maximum load weight should be based on their manufacturers' specifications. For example, 650cc motorcycles typically have a maximum load (comprising rider, passenger and all cargo) of 200kg. For bicycles and PABs, the maximum load is not well-established and will vary depending on wheelbase and size. WSH Council and NDCA are collaborating with the Nanyang Technological University to conduct a research study to determine a practical safe load limit for bicycles and PABs.

Once a safe load limit for bicycles and PABs has been established, if the rider determines that the load is excessive (either based on the motorcycle manufacturers' load limit, or the safe load limit found for bicycles and PABs), and it is feasible for the load to be split (e.g. separately-packaged items) delivery companies and intermediaries should **allow riders to call for additional riders or drivers to split the load, or split the delivery load across multiple trips, without any penalty to, or reduction in compensation for the rider.** This means that for a rider who splits the load with others, he/she gets full compensation as if he/she delivered the complete load. For a rider who makes multiple trips, he/she should get full compensation for completing the delivery and extra compensation for the effort made. Alternatively, the rider may opt to cancel the job with no penalty to the rider.

To reduce the likelihood for riders to take on excessive loads by himself/herself if a heavy load cannot be split (e.g. a single piece of furniture), delivery companies and intermediaries should **ensure that the rider is compensated at least proportionally for the time spent in travelling to the pick-up location, even though he/she declines to take the load upon discovery that it is too heavy.** To qualify for the payout in such situations, the onus is on the rider to prove that the load is beyond his/her vehicle's load limit and cannot be split (eg, by sending photos of the load, and its weight reading on a scale).

It would be ideal for companies to have systems or algorithms to identify the weight of delivery orders upfront, and assign four-wheeled vehicles to handle heavy loads. Nonetheless, delivery companies and intermediaries explained that it would be extremely challenging to develop a database of the immense variety of goods to be delivered, many of which may be one-off items with no previous record (eg with e-commerce delivery). While there are near-term constraints to develop such a database, this should be a longer-term

aspiration that would eliminate downstream issues with riders encountering heavy loads and claiming payout.

### 3.5 **Guideline 5: No bonus or penalty related to delivery time**

To address riders' concerns about delivery in adverse weather (eg heavy rain), which might be coupled with a surge in delivery demand, delivery companies and intermediaries should adopt the following measures:

- Not to set **any limit, or penalty, or bonus to deliver within a certain time**. This should apply regardless of weather conditions, but is especially relevant in bad weather.
- To **notify customers to expect delivery delays** with bad weather.
- To **remind riders to take safety precautions including seeking shelter during bad weather**, in their regular engagement with their drivers and riders.

## 4 **Conclusion**

The tripartite workgroup that formulated these guidelines hope that delivery companies and intermediaries can enhance their systems and infrastructure – factors that are within their control – based on these guidelines. This would allow delivery work to be a safer vocation, providing better peace of mind for the workers and their families.



## 5 Workgroup Composition

<b>Organisation</b>	<b>Contributor(s)</b>
WSH Council (Hospitality and Entertainment Industries) Committee	Ms Kwee Wei-Lin (Advisor)
Grab	Ms Carmen Ng, Mr Iskandar Abdullah, Mr Gabriel Ng, Ms Mabel Li
Deliveroo	Mr Jason Parke
Foodpanda	Mr Drew Shih, Ms Amanda Goh, Ms Fiona Tan Ying Qian
McDonald's Restaurants	Ms Yeo Siew Kee, Ms Sharon Choi
Domino's Pizza	Mr Muhammad Haffis Sharizal Bin Affandi
Singpost	Mr Andy Kong
Ninjavaan	Mr Lee Ghim Hock, Ms Seet Mei Ling
J&T Express	Mr Martin Tan, Mr Tan Beng Huat
Redmart	Mr Daryl Teo, Mr Willy Tan
Singapore Police Force	Mr Jimmy Law
Ministry of Manpower	Ms Ng Huiying
National Delivery Champions Association	Ms Lim Yeu Ai, Ms Siti Yashira Binte Johan
WSH Council Office	Mr Christopher Koh Mr Chan Yew Kwong Ms Julia Ng Mr Edd Hong Mr Ye Jianhong

## Annex A – List of Training Organisations and Courses

- Comfort Delgro – Defensive Driving Course\*
- Comfort Delgro – Ride Safe Course
- Singapore Safety Driving Centre - Defensive Driving/Riding Course
- Singapore Safety Driving Centre - Safe Driving Course (SDC)
- Ngee Ann CET Academy - Occupational Safety for Delivery Personnel (Motorcyclist)\*
- Ngee Ann CET Academy - Occupational Safety for Delivery Personnel (Cyclist & Walker)\*
- Ngee Ann CET Academy - Service & Food Hygiene For Delivery Personnel\*

*\*Denotes Skillsfuture claimable courses. Information above is accurate as at 18 Oct 2022.*

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