Reducing Young Drivers’ Accident Risk

Graduate Licensing Programme
and Hazard Perception Test

Miklós Kedves
Outline

• Young drivers’ risk
• Licensing systems
• Graduate driver licensing (GDL)
• Hazard perception test
• Conclusion

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Causes of death in OECD countries by age group

Reducing Young Drivers' Accident Risk

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## Young driver and all driver deaths in selected OECD countries, 2004

<table>
<thead>
<tr>
<th>Country</th>
<th>A (Young drivers)</th>
<th>B (All drivers)</th>
<th>C (Young as percent of all driver deaths)</th>
<th>D (Young as percent of total population)</th>
<th>C/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>195</td>
<td>771</td>
<td>25.2</td>
<td>11.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Austria</td>
<td>110</td>
<td>368</td>
<td>29.9</td>
<td>9.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Canada</td>
<td>262</td>
<td>935</td>
<td>28.0</td>
<td>12.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Germany</td>
<td>750</td>
<td>2 329</td>
<td>32.2</td>
<td>8.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Great Britain</td>
<td>330</td>
<td>1 106</td>
<td>29.8</td>
<td>10.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Hungary</td>
<td>53</td>
<td>397</td>
<td>13.4</td>
<td>10.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Japan</td>
<td>326</td>
<td>1 519</td>
<td>21.5</td>
<td>8.3</td>
<td>2.6</td>
</tr>
<tr>
<td>N. Zealand</td>
<td>51</td>
<td>205</td>
<td>24.9</td>
<td>12.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>74</td>
<td>269</td>
<td>27.5</td>
<td>8.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Poland</td>
<td>313</td>
<td>1 441</td>
<td>21.7</td>
<td>12.0</td>
<td>1.8</td>
</tr>
<tr>
<td>USA</td>
<td>3 999</td>
<td>13 209</td>
<td>30.3</td>
<td>12.8</td>
<td>2.4</td>
</tr>
</tbody>
</table>

### Reducing Young Drivers' Accident Risk

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Young, novice drivers' increased risk

- Age
- Gender
- Over-confident and risky driving
- Peer pressure
- Lack of experience
- Weaknesses in hazard perception abilities
Key features of young learner drivers' risk

- Sharp decrease during the first few years
- Males versus females
- Highly dangerous types of crashes
- Night-time and weekend-night crashes
- Effect of similarly aged passengers
Legislation on licensing systems

- Classification of licenses
- Theoretical and practical driving test
- Withdrawal of licences
- Penalty point system
- Special regulation for novice drivers

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Trends in licensing systems

- Addressing new skills
- Increasing driving experience
- Protective measures for novice drivers
Vehicle licensing systems

- **Traditional Licensing System**
  - Czech Republic
  - Denmark
  - Hungary

- **Two-Phase Licensing System**
  - Austria
  - Germany
  - Finland

- **Graduated Licensing System**
  - Australia
  - Canada
  - United States

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Graduated Driver Licensing (GDL)

- Reducing increased accident risk
- Controlled and supervised phasing-in of driver privileges
- Obtaining driver experience under low-risk conditions

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Recommendations for GDL systems

- Adult supervision and driving restrictions during the learner’s stage
- 30-50 hours of certified driving (including night-time driving)
- Minimum 6-month learner’s phase
- Unsupervised night driving restriction
- Passenger restrictions
- Exit test prior to full-privilege licensure
- Penalty provisions for beginners with poor driving records
New South Wales, Australia

- Driver Knowledge Test
- Learner licence
- Driving test
- First provisional licence
- Hazard Perception Test
- Second provisional licence
- Driver Qualification Test
- Unrestricted licence

Reducing Young Drivers' Accident Risk

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New South Wales, Australia

- Learner licence: 12-60 months
- First provisional licence: 12-18 months
- Second provisional licence: 24-30 months
# Licence restriction for L, P1 and P2

<table>
<thead>
<tr>
<th>Licence restriction</th>
<th>Learner Licence</th>
<th>Provisional P1 licence</th>
<th>Provisional P2 licence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zero Blood Alcohol Concentration (BAC)</strong></td>
<td>You cannot have any alcohol in your system when you drive a vehicle.</td>
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</tr>
<tr>
<td><strong>Demerit points</strong></td>
<td>A learner who commits driving offences may have their licence cancelled.</td>
<td>Your driver licence will be suspended if you incur 4 or more demerit points.</td>
<td>Your driver licence will be suspended if you incur 7 or more demerit points.</td>
</tr>
<tr>
<td><strong>Location restrictions</strong></td>
<td>You must not drive in Sydney Centennial Park</td>
<td>None.</td>
<td>None.</td>
</tr>
<tr>
<td><strong>Mobile phone</strong></td>
<td>You must not use any function of a mobile phone, including hands free devices, when driving.</td>
<td>You must not use any function of a mobile phone, including hands free devices, when driving.</td>
<td>You cannot use a hand-held mobile phone when driving.</td>
</tr>
</tbody>
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**Reducing Young Drivers' Accident Risk**

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## Licence restriction for L, P1 and P2

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<tr>
<td><strong>Passengers</strong></td>
<td>None.</td>
<td>P1 drivers under 25 years of age are restricted to carrying one passenger under 21 years of age between 11pm and 5am. Further restrictions for disqualified drivers.</td>
<td>If you are disqualified from driving while a provisional licence holder, you will be restricted to carrying one passenger at all times while driving for a period of 12 months.</td>
</tr>
<tr>
<td><strong>Seatbelts</strong></td>
<td>You must ensure all occupants are using the seatbelt.</td>
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</tr>
<tr>
<td><strong>Speed limit</strong></td>
<td>You must not drive faster than 80km/h.</td>
<td>You must not drive faster than 90km/h.</td>
<td>You must not drive faster than 100km/h.</td>
</tr>
<tr>
<td><strong>Supervising a learner</strong></td>
<td>You must not supervise another learner driver.</td>
<td>You must not supervise another learner driver.</td>
<td>You must not supervise another learner driver.</td>
</tr>
</tbody>
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## Licence restriction for L, P1 and P2

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</thead>
<tbody>
<tr>
<td><strong>Supervision</strong></td>
<td>You must not drive without a supervising driver.</td>
<td>None.</td>
<td>None.</td>
</tr>
<tr>
<td><strong>Towing</strong></td>
<td>You must not tow a trailer or any other vehicle.</td>
<td>You are allowed to tow light trailers up to 250kg unloaded weight.</td>
<td>None.</td>
</tr>
<tr>
<td><strong>Vehicles</strong></td>
<td>None.</td>
<td>You cannot drive vehicles with high performance six cylinder engines, eight or more cylinders, turbo-charged engines, or engine performance modifications.</td>
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</tr>
</tbody>
</table>
• More experienced drivers have more advanced hazard perception skills.

• Computerised hazard perception tests can:
  – Identify drivers with inadequate hazard perception skills
  – Encourage the development of hazard perception skills
Hazard Perception Test

• The New South Wales Graduate Driver Licensing system has two hazard perception tests.

• Computer-based hazard perception tests:
  – Allow for standardisation
  – Easy to mark
  – Cost-effective to administer
Conclusion

• GDL programmes managed to reduce young novice drivers' accident risk.

• Touch-screen computer-based hazard perception tests are a good measure of some higher skill.

• The Hungarian traditional licensing programme would benefit from the introduction of some GDL elements.
Thank you for your attention

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