

Asperger's Syndrome:

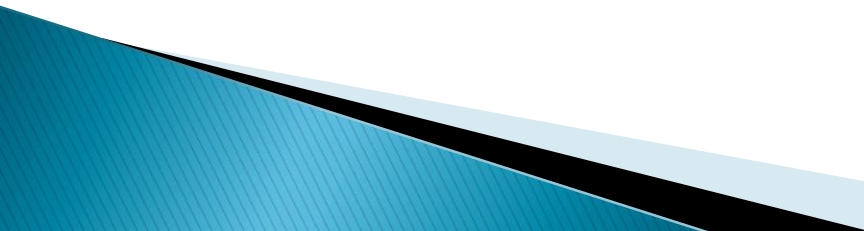
The implication on driver training methods & road safety

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Highlands Drive Safe

What is Asperger's ?

- ▶ *"After all, the really social people did not invent the first stone spear. It was probably invented by an Aspie who chipped away at rocks while the other people socialized around the campfire. Without autism traits we might still be living in caves"*

Temple Grandin.

- ▶ Aspergers is prevalent in 62:10,000 in the population (McDermott, et al, 2006)
 - ▶ Autism is prevalent in 2.6% of the population (Young Shin Kim *et al*, 2011)
 - ▶ IQ above 70
 - ▶ Early speech onset
 - ▶ Impairment in social interaction
 - ▶ Failure to develop peer relationships
 - ▶ Restricted repetitive patterns of behaviour, interests and activities
 - ▶ Often have other issues i.e depression, anxiety, ADD
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Case studies

- ▶ James
 - ▶ Male, 20 yrs
 - ▶ Aspergers, ADHD
 - ▶ Medicated
 - ▶ Not reported
 - ▶ Passed L test one attempt
- ▶ Simon
 - ▶ Male, 26 yrs
 - ▶ Aspergers, Anxiety, depression
 - ▶ Self medicates
 - ▶ Not reported
 - ▶ Passed L test one attempt




Case studies

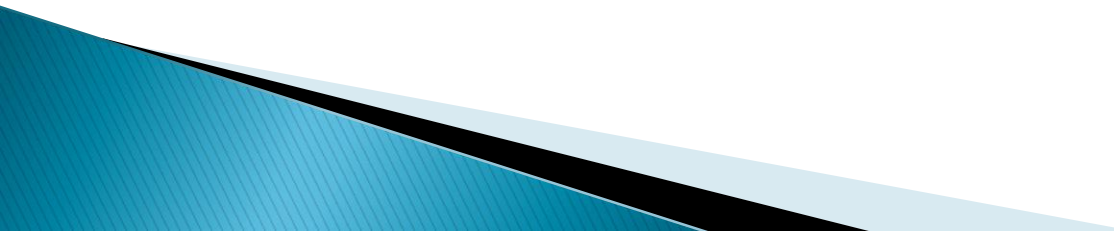
- ▶ John
- ▶ Male, 20 yrs
- ▶ Aspergers, ADHD, depression, suicidal tendencies
- ▶ Medicated
- ▶ Not reported until RTA test
- ▶ Passed L test one attempt
- ▶ Passed P1 test 100% first attempt

- ▶ Jack
- ▶ Male, 18 yrs
- ▶ Aspergers, dyspraxia
- ▶ Medicated
- ▶ Reported to RTA
- ▶ Passed L test one attempt
- ▶ Passed P1 test first attempt over 95%

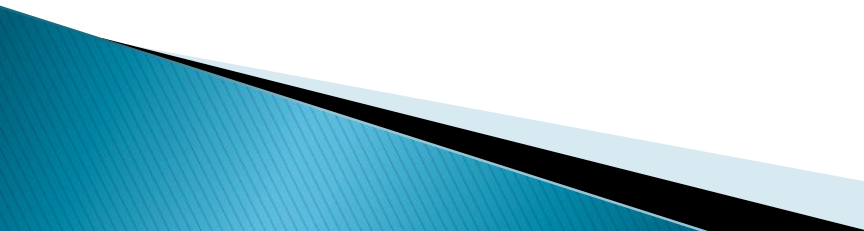
Characteristics of Asperger's

- ▶ Find social situations hard
 - ▶ Find it hard making small talk
 - ▶ Literal thinker, inflexible
 - ▶ Repetitive routines
 - ▶ Stress when routine suddenly changes
 - ▶ Lack of empathy
 - ▶ Hard to read social cues
 - ▶ Very narrow topics of interests
 - ▶ Highly logical thinking, eye for detail
 - ▶ Normal to above average intelligence
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Educational Issues

- ▶ Understanding the individual needs of the student with AS
 - ▶ Structure and routine
 - ▶ Use of diagrams
 - ▶ Teaching predicting skills
 - ▶ Set key words and sequences
 - ▶ Sensitivities
 - ▶ Misunderstandings
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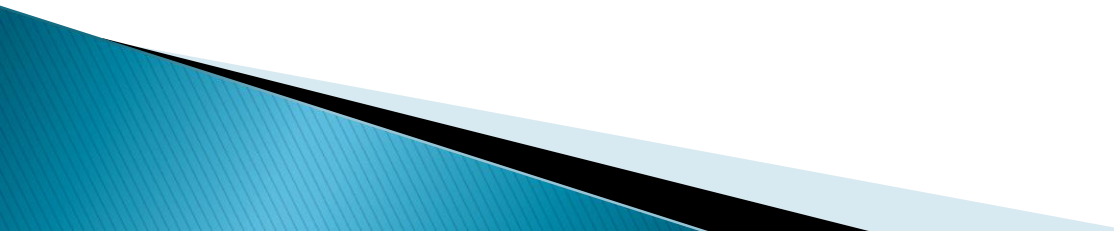
Issues for Instructors

- ▶ Medical conditions generally not declared
 - ▶ Resulting in poor communication and dangerous situations with students
 - ▶ Unpredictability of student responses and actions
 - ▶ Handling emotional outbursts or stress situations
 - ▶ Dangers of misinterpretation whilst on road
 - ▶ Teaching transference of knowledge
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RMS Testing Procedures (NSW)

- ▶ Current learner requirements – 120 hours (includes 20 actual night hours)
- ▶ 12 month learner period for 16 – 24yrs (no time/hour restriction for over 25 yrs)
- ▶ If a diagnosed medical condition is recognised in AUSROADS Fitness to Drive a learner must declare on the *Application for licence* form and have their Doctor complete a medical form.

Issues for RMS (RTA)

- ▶ Learners and carers not declaring medical conditions or medication use
 - ▶ Learners use of medication to 'balance' up for test day
 - ▶ Misunderstanding of instructions given by RMS testing officer
 - ▶ Taking instructions literally
 - ▶ Stress point – handling reactions
 - ▶ Effect of medications (or lack of) on driving
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Medical Report



Any fee charged for the examination is payable by the licensee and not the RTA. Sections 1 and 2 must be completed in all cases. Please complete all other relevant sections and where appropriate, provide additional information.

1 History

How long have you treated this patient?

Years _____ Months _____

2 Vision

VISION STANDARDS.

Car, Rider and Light Rigid Drivers.

The criteria for an unconditional licence are NOT met
- if the person's visual acuity in the better eye or
with both eyes together is worse than 6/12.

Heavy Vehicles/Commercial Vehicles.

The criteria for an unconditional licence are NOT met
- if the person's visual acuity is worse than 6/9 in the
better eye; or
- if the person's visual acuity is worse than 6/12 in
either eye.

See 'Assessing Fitness to Drive' for

Are glasses/lenses worn (distance) _____

Visual acuity (distance) R _____

Uncorrected 6/ _____

With glasses 6/ _____

Fields of Vision _____ Normal

Double vision _____

Poor night vision _____

An ophthalmologist or optometrist can complete this section if you wish.

Name _____

Signature _____

3 Cardio-Vascular Condition No Yes

If No proceed to the next question. If Yes complete the following.

* Acute myocardial infarct _____ No Yes

* Angioplasty _____ No Yes

* Angina _____ No Yes

* Refer to Guidelines - Heavy Vehicle Condition likely to affect driving _____ No Yes

Stress test _____

Ejection Fraction % _____

Cardiomyopathy _____

CABG _____

Hypertension/Hypotension _____

Recurrent / persistent arrhythmia _____

Cardiac pacemaker _____

Aneurysm (site) _____

Defibrillator _____

4 Diabetes

If No proceed to the next question following.

Controlled by _____ Tablets insulin

Compliant with medication _____ Yes No

Hypoglycaemic awareness _____ Yes No

(date of last episode) _____

End organ effects _____ No Yes

5 Musculo-Skeletal Condition

eg. degenerative or painful joints, arthritis, loss of limbs/digits, orthopaedic defect.

Diagnosis _____

Condition likely to affect driving _____ No Yes

6 Epilepsy

No Yes

If No proceed to the next question. If Yes complete the following.

Type _____

Date of onset _____

Date of last seizure _____

confirmed by neurologist _____ No Yes

24 hour EEG _____ Normal Abnormal

Sleep epilepsy _____

7 Neurological Condition

No Yes

If No proceed to the next question. If Yes complete the following.

Cognitive and/or Intellectual

Impairments _____ No Yes

Dementia _____ No Yes

Traumatic Brain Injury _____ No Yes

Neuromuscular Condition:

Diagnosis _____

8 Sleep Disorder

No Yes

If No proceed to the next question. If Yes complete the following.

Sleep Apnoea _____ No Yes

Narcolepsy _____ No Yes

Well controlled _____ No Yes

9 Mental Health/Nervous Disorder

eg. psychotic state, depression, schizophrenia.

Diagnosis _____

10 Drugs likely to affect driving

No Yes

If Yes complete the following.

Non-prescribed drugs _____ No Yes

Indication of alcohol abuse _____ No Yes

Comments on any condition likely to affect driving.

Append additional pages if necessary.

Office Use Only RSO Signature and date
(Check that Question 2 has been completed and meets standards.)

Recommendations

- ▶ Further study needed of drivers with AS, the effect of medication and the training methods used.
 - ▶ Support strategies to be introduced for new and existing drivers with AS or special needs.
 - ▶ Medical testing and clearance for ALL drivers to screen for undisclosed medical issues that may effect road safety.
 - ▶ Training for all RMS staff involved in driver testing for special needs clients.
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