

SEIZURE Supporting information

This guideline has been prepared with reference to the following:

NICE. Epilepsies in children, young people and adults. 2022. London. NICE

<https://www.nice.org.uk/guidance/ng217>

Patients may resume driving a car or motorcycle after 6 months, if agreed by a specialist and no abnormality is found on an EEG/brain scan?

A prospective analysis of 1386 patients in Australia (Brown et al, 2015) found that after a first-ever seizure, patients overall require 5–8 months off the road before their conditional probability (monthly risk) of seizure recurrence falls to between 1.7% and 3.1% per month, equating to the suggested accident risk ratio of 2.0–3.0, and an estimated monthly risk of a seizure behind the wheel of 1 in 770 to 1 in 1440.

A randomised trial using data from the Multicentre study of early Epilepsy and Single Seizures (MESS) (Bonnett, 2010) found that 6 months after the index seizure, the risk of recurrence in the next 12 months for those who started antiepileptic drugs was significantly below 20% (unadjusted risk 14%, 95% CI 10% to 18%). This supports current UK driving guidelines. (DVLA 2013) For patients who did not start treatment the risk estimate was less than 20% but the upper limit of the confidence interval was greater than 20% (18%, 13% to 23%). Multivariable analyses identified subgroups with a significantly greater than 20% risk of seizure recurrence in the 12 months after a six month seizure-free period, such as those with a remote symptomatic seizure with abnormal electroencephalogram results.

Bonnett LJ, Tudur-Smith C, Williamson PR, et al. Risk of recurrence after a first seizure and implications for driving: further analysis of the Multicentre study of early Epilepsy and Single Seizures. *BMJ* 2010;341:c6477
<http://www.bmj.com/content/341/bmj.c6477>

Brown JW, Lawn ND, Lee J et al. When is it safe to return to driving following first-ever seizure? *J Neurol Neurosurg Psychiatry*. 2015;86:60-4
<http://jnnp.bmj.com/content/early/2014/04/25/jnnp-2013-307529.full>

Driver and Vehicle Licensing Agency. Current Medical Guidelines: DVLA guidance for professionals – Neurological appendix. Swansea, DVLA, 2013.
<https://www.gov.uk/current-medical-guidelines-dvla-guidance-for-professionals-neurological-chapter-appendix>

Evidence Level: II

**Last amended April 2023
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