



Traffic medicine and oncology

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«Verkehrsmedizinerin SGRM»



Administrative processes

Difference between ability to drive and fitness to drive

Reserve capacity

Right to report

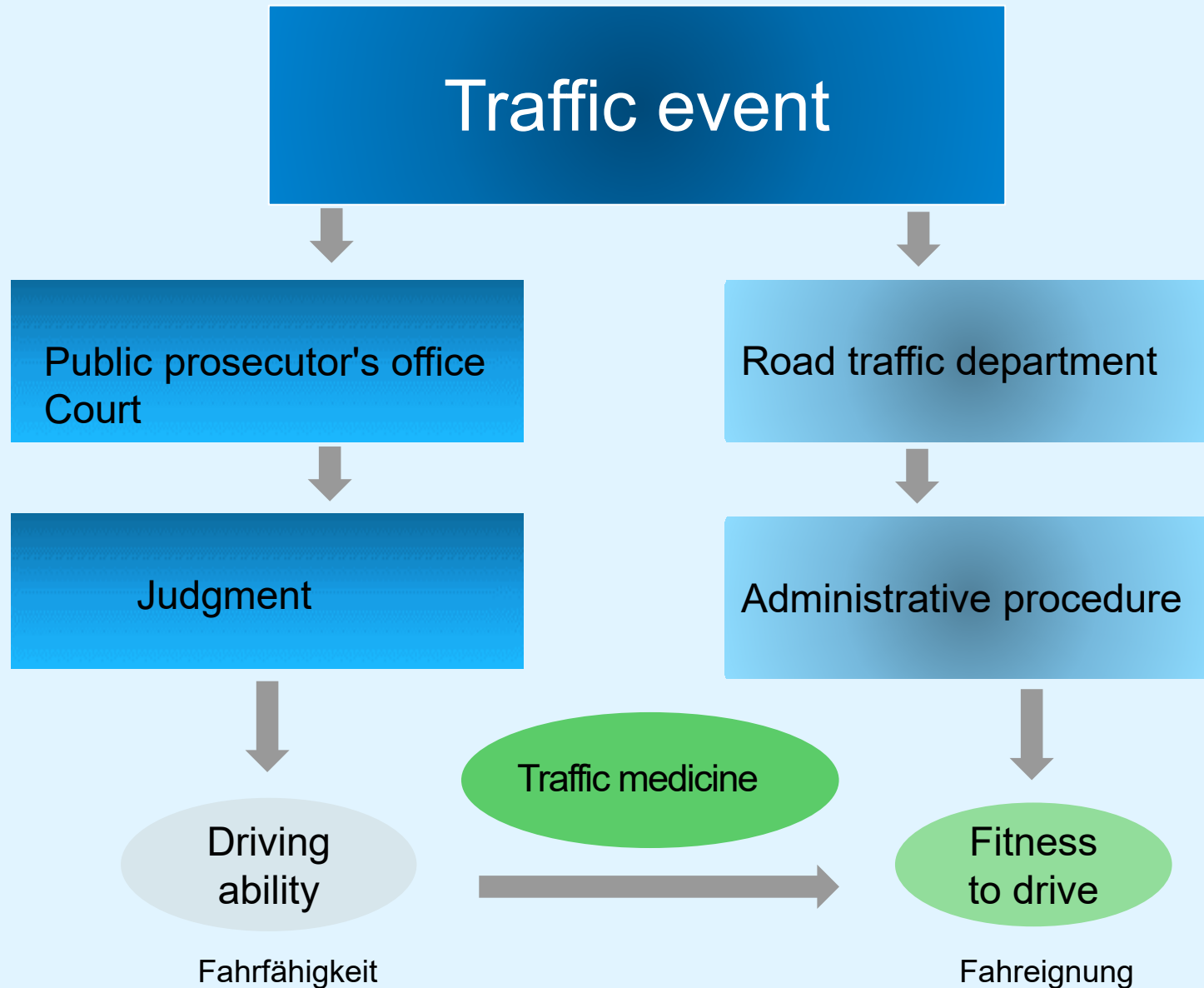
Causes for not being fit to drive (able to drive)

Driving license; Medical groups and minimum medical requirements

Overview problem areas for an oncology patient

Medication examples (Opioids, THC); transferable warnings and conclusions

Time for questions





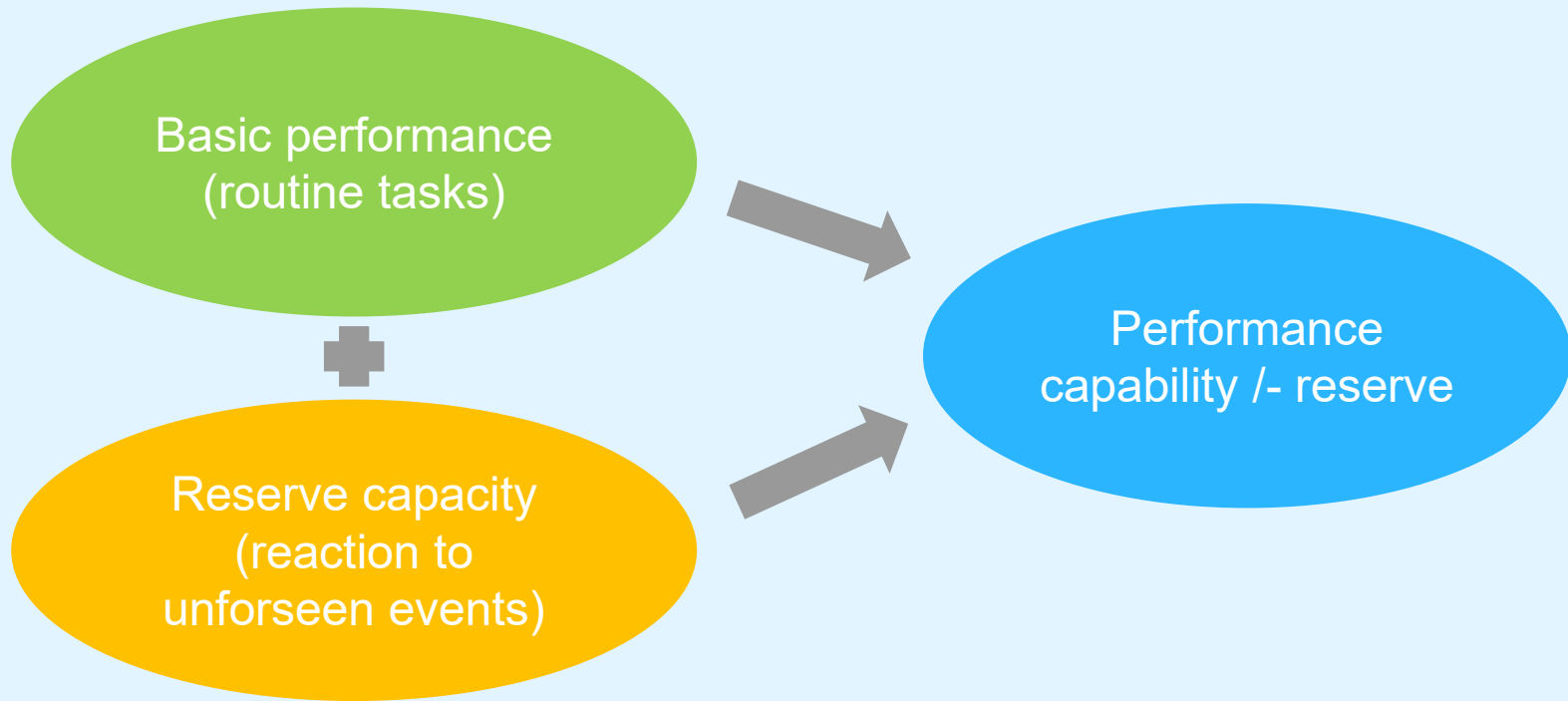
What's the difference?

Driving ability

Current, time-limited and **event-related**, physical and mental ability to drive a vehicle safely.

Fitness to drive

General, not limited in time and non-event-related physical and mental aptitude to drive a vehicle safely.



Modified according to: Road Traffic Control Ordinance (VSKV-ASTRA)



Has your patient enough performance capability and reserve capacity to

- be able to perceive specific (and complex) traffic situations?
- to be able to process what is perceived adequately and sufficiently quickly (cognitive and motoric)?
- to be able to react appropriately to the situation (cognitive and motoric)?



Swiss Road traffic act: Article 15d

Clarification of the fitness to drive

If there is any doubt about a person's fitness to drive, they will undergo a fitness to drive test, in particular in the case of

d. Report from a cantonal IV office

e. Notification by a doctor that a person is unable to drive motor vehicles safely due to a physical or mental illness, a disability or an addiction.

(=> Right to report = Melderecht)

Doctors are released from professional secrecy with regard to reports [...]. They may submit the report directly to the competent cantonal road traffic authority or to the supervisory authority for doctors.



Reasons why the driving ability may be impaired

alcohol



drugs



Rehabnet.com

medicaments / therapies



**ERST FRAGEN,
DANN FAHREN!**

**MEDIKAMENTE KÖNNEN IHRE
FAHRFÄHIGKEIT BEEINTRÄCHTIGEN.**

bfu-Kampagne; 2018

tiredness



Gesundheitshandbuch.de



The playmobil film; youtube

diseases

(which can lead to cognitive impairment or impaired reserve capacity)



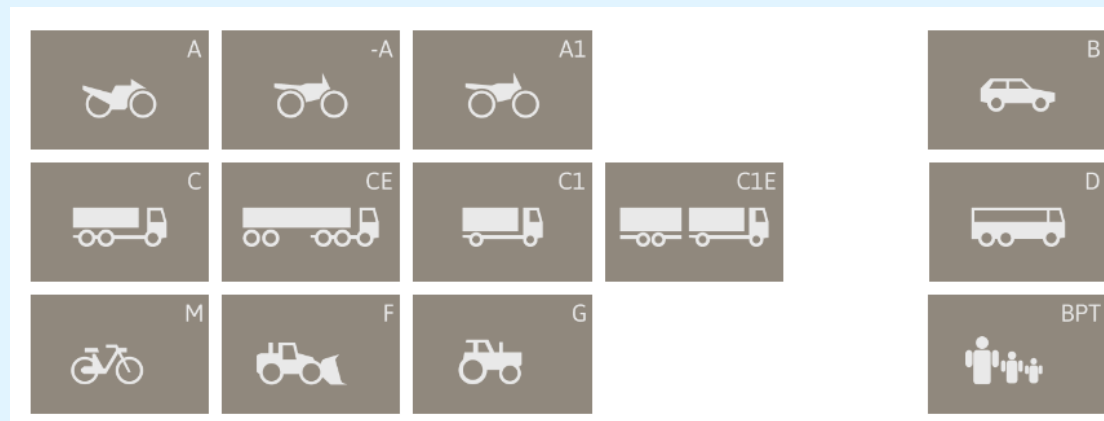
Medical groups

1. Medical group

- a. Driver's license category A und B
- b. Driver's license subcategory A1 und B1
- c. Driver's license special categories F, G und M

2. Medical group

- a. Driver's license category C und D
- b. Driver's license subcategory C1 und D1
- c. Permit for professional passenger transport (BPT)
- d. Traffic experts





Minimum medical requirements (Medizinische Mindestanforderungen; Anhang 1 Verkehrszulassungsverordnung (VZV))

1. Vision
2. Hearing ability
3. Alcohol, drugs und psychotropically active drugs
4. Mental disorders
5. Organically caused brain disorder
6. Neurologic diseases
7. Cardiovascular diseases
8. Metabolic diseases
9. Diseases of the respiratory and abdominal organs
10. Diseases of the spine and musculoskeletal system



Minimum medical requirements (Medizinische Mindestanforderungen; Anhang 1 Verkehrszulassungsverordnung (VZV))

	1. Gruppe	2. Gruppe
Organically caused brain disorders	No illnesses or organically caused mental disorders with significant impairment of consciousness, orientation, memory, thinking, reaction time or other brain disorders. No manic or significant depressive symptoms. No traffic-related Behavioral. No impairment of traffic-related power reserves.	No diseases that impair brain performance. No organically caused psychological disorders.
Neurological diseases	No illnesses or consequences of injuries or operations of the central or peripheral nervous system with significant effects on the ability to drive a motor vehicle safely. No disturbances of consciousness or - losses. No balance problems.	No illnesses or consequences of injuries or operations of the central or peripheral nervous system. No disturbances of consciousness or - losses. No balance problems



Problem areas for oncology patients from a traffic medicine perspective

- Epileptic seizures
- Changes in character
- Mental health problems
- Ophthalmologic problems
- Fatigue/tiredness
- Cognitive impairment
- Reduction of the performance reserve / increased exhaustion
- Pain
- Medication / therapy



Important questions

1. Does the disease impair the fitness to drive?
2. Does the medication / therapy impair the fitness to drive?
3. Does the patient understand his illness and has insight into the illness?
4. Can known deficits (motoric or cognitive) be compensated?
5. What is the prognosis?



Fahreignung mit Epilepsie

Fitness to drive and Epilepsy

1. Medical group

• First seizure

- Post-traumatic or postoperative early seizure (within one week) as well as another, clearly **provoked seizure** (partial sleep deprivation, for example, is usually not sufficient)
 - > As a rule, driving leave of **3 months**
 - **Unprovoked seizure**
 - > As a rule, driving leave **6 months**
- If drug therapy is started despite EEG and imaging without relevant findings, the driving ban can be shortened to 3 months.
- In the case of **epilepsy**, initial registration or re-registration as a motor vehicle driver is generally possible if the driver has been seizure-free (with or without antiepileptic drugs) for one year.
- The **EEG findings** must be compatible with fitness to drive.
- No fitness to drive if antiepileptic drugs are discontinued, during tapering and 3 months thereafter (driving leave).

2. Medical group

- In the case of a **first provoked seizure** in the context of acute, temporary illnesses or their treatment, a grace period of six months (seizure in adulthood; Cat. D 5 years seizure-free without medication) is sufficient, provided the provoking conditions are no longer present.
- In the case of a **first unprovoked seizure**, a waiting period of two years (seizure in adulthood; Cat. D 5 years seizure-free without medication) must be observed. Exception: If the vehicle is used as a private vehicle for C1 (analogous to Cat. B), the provisions of Cat. B. apply.
- In the case of **epilepsy** that has manifested itself once, initial registration or re-registration for driving license category C or D1 is only possible if the driver has been **seizure-free for five years without medication**.
- Initial admission or re-admission to **Cat. D is not possible** once **epilepsy** has manifested itself (exception: cured childhood epilepsy syndromes).



Problems with opioids

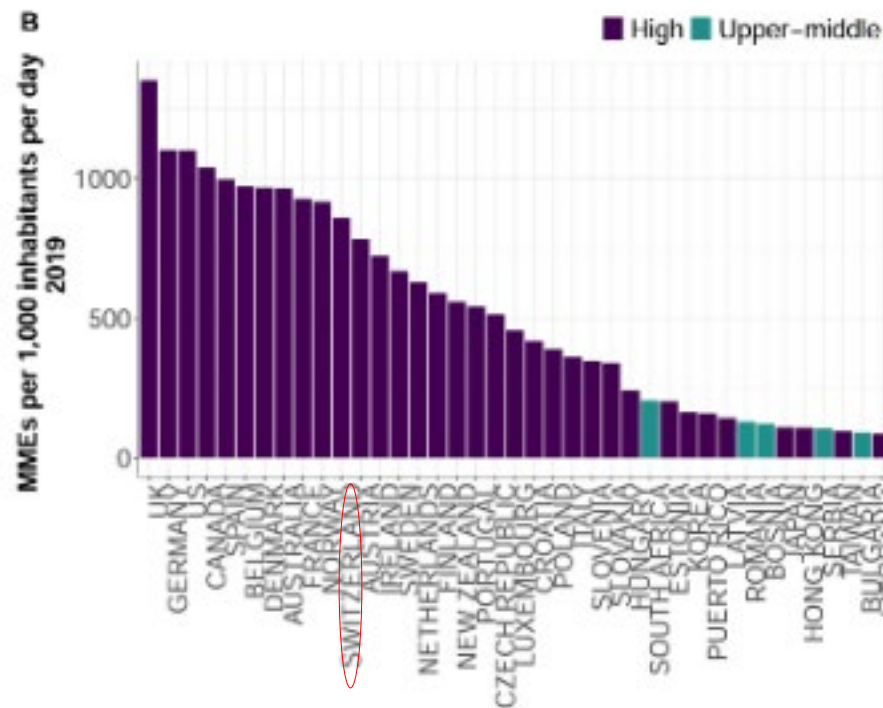
eClinicalMedicine

Part of THE LANCET *Discovery Science*

RESEARCH PAPER · Volume 42, 101198, December 2021 · [Open Access](#)

Global consumption of prescription opioid analgesics between 2009-2019: a country-level observational study

[Sahan Jayawardana](#)¹ · [Rebecca Forman](#)¹ · [Charlotte Johnston-Webber](#)¹ · [Allen Campbell](#)² · [Stefano Berterame](#)³ · [Cees de Joncheere](#)³ · et al. [Show more](#)





Treatment with centrally acting analgesics

- No relevant side effects after familiarization phase (approx. 4-8 weeks)
- Stable pain medication (monotherapy if possible)
- No concomitant use (narcotics)
- Adherence to driving abstinence (ban on driving under the influence of alcohol)
- Underlying illness without traffic-relevant restrictions
- Otherwise minimum medical requirements fulfilled, no traffic-relevant illnesses
- No relevant daytime sleepiness
- No acute pain conditions
- No relevant cognitive performance deficits
- Understanding of illness/treatment
- Compliance/adherence
- 2. medical group only in individual cases (e.g. C1 for private use)



Treatment with centrally acting analgesics

- Previous use of narcotics
- Suspicion of increased alcohol consumption
- Underlying illness with possible traffic-relevant restriction
- Minimum medical requirements questionably fulfilled, suspicion of diseases relevant to traffic medicine
- If cognitive performance deficits are suspected, traffic psychological performance diagnostics are indicated
- Insight into illness/treatment uncertain
- Compliance/adherence uncertain
- Question about technical adaptation (arrange via road traffic department)



Treatment with centrally acting analgesics

- No stable medication
- Co-use (narcotics) Addiction problems (alcohol, narcotics, medication)
- Underlying illness with traffic-relevant restriction
- Minimum medical requirements not met
- Relevant cognitive performance deficits
- Relevant daytime sleepiness
- No insight/understanding of illness
- Acute pain conditions



Cannabinoids as a medicine

- Multiple sclerosis
- Nausea during chemotherapy
- Pain
- Depression
- Autoimmune diseases
- Palliative therapy
- Arthritis
- Tics and Tourette syndrome

Cannabis and Cannabinoid Research
Volume 2.1, 2017
DOI: 10.1089/can.2018.0034

Cannabis and
Cannabinoid Research
Mary Ann Liebert, Inc. publishers

REVIEW Open Access

An Update on Safety and Side Effects of Cannabidiol:
A Review of Clinical Data and Relevant Animal Studies
Kerstin Müllner and Franjo Grotenhemen

CRITICAL REVIEW AND INVITED COMMENTARY

Cannabidiol: Pharmacology and potential therapeutic role
in epilepsy and other neuropsychiatric disorders
*Orrin Devinsky, †Maria Roberta Cilio, ‡Helen Cross, §Javier Fernandez-Ruiz, ¶Jacqueline French, ¶Charlotte Hill, Russell Katz, Independent Consultant, **Vincenzo Di Marzo, ††Didier Jutras-Aswad, †††William George Notcutt, ##Jose Martinez-Orgado, ***Philip J. Robson, †††Brian G. Rohrbach, †††Elizabeth Thiele, ¶Benjamin Whalley, and *Daniel Friedman
Epilepsia, 55(6):791–802, 2014
doi: 10.1111/epi.12631

ÜBERSICHTSARBEIT

Das therapeutische Potenzial
von Cannabis und Cannabinoiden
Franjo Grotenhemen, Kirsten Müller-Vahl

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Treatment of Tourette syndrome with
cannabinoids
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THC und CBD

THC (Tetrahydrocannabinol)

analgesic
muscle relaxant
Effective against nausea and vomiting
appetizing
lowering the intraocular pressure
others (antidepressant, sedative, etc.)
intoxicating, psychoactive

CBD (Cannabidiol)

- antiepileptic
 - anti-inflammatory
 - antipsychotic
 - anxiolytic
 - appetite suppressing
 - others (neuroprotective, antiproliferative, etc.)
 - non-intoxicating
- counteracts the psychoactive effect of THC.



Cannabinoides as medicine

Final conclusions of the Federal Office of Public Health (BAG)

The review revealed

- Moderate evidence for the treatment of chronic pain
- Low evidence for improvement of nausea and vomiting in chemotherapy, weight gain in HIV patients, sleep disorders and Tourette syndrome

Cannabinoids were associated with an increased risk of transient adverse effects, including severe adverse effects.

Quelle: <https://www.bag.admin.ch/.../bag/.../cannabinoide-heilmittel.../cannabinoide-heilmittel...>



Adverse effects THC

- Dizziness
- Drowsiness
- Tiredness
- Nausea
- More or less appetite
- Weight changes in both directions
- Diarrhea
- ...



Contraindications THC

Absolute

- Allergies / hypersensitivity
- Suicidal tendencies or suicidal thoughts
- Breastfeeding, pregnancy

Strict

- Psychiatric illnesses (schizophrenia, psychoses, history of severe personality disorders, etc.)
- Serious, manifest cardiovascular diseases
- Addictive disorders
- Children, adolescents < 18 years
- Active road users



Medicinal cannabis

- Correct indication (see fact sheet BAG Cannabis Medicinal Products 24.06.2020)
 - For chronic pain conditions, for example neuropathic pain or pain caused by cancer
 - For spasticity and cramps caused by multiple sclerosis or other neurological diseases
 - For nausea and loss of appetite in the case of chemotherapy
- No relevant side effects after familiarization phase (approx. 4-8 weeks)
- No concomitant use (narcotics)
- Driving abstinence (ban on driving under the influence of alcohol)
- Underlying illness without traffic-relevant restrictions
- Otherwise minimum medical requirements fulfilled, no traffic-relevant illnesses
 - No relevant daytime sleepiness
 - No acute pain conditions
 - No relevant cognitive performance deficits
 - Insight into illness/treatment
 - Compliance/adherence
 - No replacement and no substitution for previously illegal consumption (consumption shift)
- 2. medical group only in individual cases (e.g. C1 for private use)



Responsibility of the treating physician

Are the minimum medical requirements met?

Are there any illnesses or medical conditions with a possible negative effect on fitness to drive or driving ability?

Does the prescribed medication impair the ability to drive?

Right to report and duty to inform!!!

A cannabis urine test can be positive during a police check, even if the driver “only” used CBD-products.

Regardless of whether the driver can produce a doctor's prescription, this usually leads to the withdrawal of the driver's license, although according to Article 2 of the Traffic Regulation Ordinance, persons who can prove that they are taking a substance according to a doctor's prescription are not deemed to be unfit to drive as soon as a substance is detected.



Medical right to Report – Art. 15d road traffic act



Justiz- und Sicherheitsdepartement des Kantons Basel-Stadt

Kantonspolizei

▷ Verkehr

► **Administrativmassnahmen**

Ärztliche Meldung bei Zweifeln an der Fahreignung

Gestützt auf Art. 15d Abs. 1 lit. e* und Art. 15d Abs. 3** des Strassenverkehrsgesetzes (SVG) erachte ich bei folgender Person eine verkehrsmedizinische Fahreignungsabklärung als angezeigt:

Name:

Vorname:

Geburtsdatum (tt.mm.jjjj):

Strasse:

PLZ/Wohnort:

1. Kurze Schilderung des verkehrsmedizinisch relevanten Zustandes/Krankheitsbildes und der allfälligen Diagnosen:

siehe beiliegenden Bericht

2. Ergänzende Informationen:

Die betroffene Person ist über die Meldung:

informiert

NICHT informiert

Die betroffene Person ist uneinsichtig

3. Weiteres Vorgehen?

Empfehlung einer Fahreignungsuntersuchung bei:

Stufe 3-Arzt

Stufe 4-Arzt

Spezialarzt:

Es bestehen ernsthafte Zweifel an der Fahreignung, sodass zunächst kein Fahrzeug gelenkt werden sollte, bis weitere Abklärungen getroffen wurden.



When to report?

- Patients for whom the issue has already been discussed and who may have been given a driving ban, but who do not adhere to it
- Patients with higher driving license categories (e.g. truck drivers) who are professionally dependent on the license



- The invalidity insurance (IV) can also make a notification as part of the IV clarification
- At the request of the IV office, the cantonal authority informs the IV office whether a particular person has a driver's license.



What other options are there?

Ergolzstrasse 1
Postfach
4414 Füllinsdorf
T 061 552 00 44
F 061 552 00 10
mfk.fa@bl.ch
www.mfk.bl.ch

**BASEL
LANDSCHAFT** 
SICHERHEITSDIREKTION
MOTORFAHRZEUGKONTROLLE

Verzichtserklärung

Familienname	<input type="text"/>
Lediger Name	<input type="text"/>
Vorname(n)	<input type="text"/>
Strasse Nr.	<input type="text"/>
PLZ / Ort	<input type="text"/>
Geburtsdatum	<input type="text"/>
Telefon tagsüber	<input type="text"/>
Email	<input type="text"/>

- Ich erkläre, dass ich keine Motorfahrzeuge und/oder Schiffe mehr führen werde und sende meine(n) Führerausweis(e) zur Annullation an die Motorfahrzeugkontrolle.
- Ich erkläre, dass ich auf die Führerausweiskategorie(n) verzichte. Es ist eine kostenpflichtige¹ Neuausstellung eines Führerausweises im Kreditkartenformat (FAK) erforderlich.
- Bei einem Verzicht auf einzelne Kategorien sind uns die folgenden Unterlagen einzureichen:
- das ausgefüllte Formular "Neuausstellung eines Führerausweises im Kreditkartenformat"²
 - den aktueller Führerausweis
 - ein farbiges Passfoto gemäss den auf dem Formular aufgeführten Kriterien
 - diese ausgefüllte Verzichtserklärung
- Ich erkläre, dass ich auf die Schiffsführerausweiskategorie(n) verzichte.
- Der Führerausweis wird zur Änderung an die Abteilung Kleinschiffahrt in Liestal weitergeleitet

- Temporary waiver of the driving license (so-called depot)
- Declare a driving ban



Case example

48-year-old woman

St.n. breast carcinoma right ED 2017

2018 surgery currently taking cimifemin and tamoxifen

Third party notification by the IV on 20.01.2021 due to moderate cancer-related fatigue with premature tiredness and exhaustion.





Case example continued

- Work activity in cleaning 40%
- Driving experience unencumbered, mileage 20'000 - 30'000 km/year
- Current symptoms: Pain in the area of the right thorax when carrying heavy loads
- Fatigue significantly improved





Case example continued

Examination findings:

- Psychopathologically unremarkable
- No concentration disorders
- Cognitive short tests unremarkable
- Somatically inconspicuous

=> Fitness to drive given.





Swiss Medical Weekly

Formerly: Schweizerische Medizinische Wochenschrift

An open access, online journal • www.smw.ch

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Cite this as: Swiss Med Wkly. 2021;151:w20501

Fitness-to-drive for glioblastoma patients

Guidance from the Swiss Neuro-Oncology Society (SwissNOS) and the Swiss Society for Legal Medicine (SGRM)

FORTBILDUNG • MEDIZIN FORUM

Eine häufig auftretende Frage

Fahreignung von Tumorpatienten –
was ist zu beachten?



Quelle: createvalue.org