

# **MOTORCYCLES AND FRICTION**



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#### WHO ARE SMC?

- Founded 1963
- 65 000 individual members
- 25% of Swedish motorcycle owners are members!
- 21 regions and 350 clubs
- 14 persons employed
- Our own magazine, office, travel agency, certified advanced training activites, international, national, regional and local lobby activities
- National consultation status in all topics concerning motorcycles
- Co-operate with many organizations, insurance companies and public authorities
- Members of FEMA, FIA and FIM



## VISION ZERO SINCE 1997 – LITTLE FOCUS ON MOTORCYCLES AND MOPEDS

- Infrastructure is planned, built and maintained from a car perspective
- This fact makes friction even more important!





## **TWO WHEELS = DEPENDENT OF GOOD** FRICTION!

- All vehicles with 2 wheels are depending on good friction bicycles, mopeds and motorcycles
- We have to rely on "two stamps" on the road
- Most important where most accidents occur in curves and intersections
- Demands from the road owner and **IF/HOW** the entrepreneur follows the demands can mean life or death for riders
- Simple and cost efficient measures can save our lives



## **GRAVEL IS INVOLVED IN 25 % OF ALL MC** ACCIDENTS WITH SEVERE INJURIES



Datum

# Andel allvarligt skadade på mc i olyckor med löst grus enligt patienten 2014-2019

källa Strada sjukvård

3





Allvarligt skadade på mc anger löst grus som bidragande olycksorsak i upp till 25% av olyckor utanför tätort. Inom tätort är andelen lägre



#### **GRAVEL COMES FROM "SNABELLAGNING"AND SEALINGS – INVISIBLE AND UNPREDICTABLE**











#### WHY IS THE GRAVEL A PROBLEM?

- Gravel on road = <u>friction like a winter road</u>
- Rules say: remove gravel within 12-24 (6-48) hours which is a huge improvement **(2 hours possible**)
- Problem; invisible gravel is left without warning sings = increased risk of accidents + <u>expensive for</u> <u>car owners</u> (quadrupled in 15 years)
- Riders are not expecting gravel on asphalt
- The rules and regulation is OK but must be obeyed
- There is a **huge** potential for improval of methods
- **One accident from 2011** Dutch riders in Sweden
- And now some examples from our members..





#### **GRAVEL FROM SEALINGS/SNABELLAGNING**









#### **GOOD EXAMPLES FROM NORWAY**







Maintenance with "snabellagning" is only allowed for 5 kilometers, then the gravel must be removed. Also dedicated signing for motorcycles! Two simple measures that reduce the accident risk



## ANOTHER PROBLEM – ASPHALT EDGE/ SUPPORTING STRIP

- Supporting strip ("stödremsa")of gravel are used to protect the road side
- Problem = cars, buses and lorries drive on the support strip = gravel on the road
- Most problems in curves and intersections where the accident risk for motorcycles is highest
- There are many solutions and simple measures but there is no demand to use them!
- Demand is needed for paved supporting strips – otherwise the accidents will continue to happen



## SVIC

#### **BAD EXAMPLES**













#### **BLEEDING ASPHALT & SLIPPERY ROADS**

- Accidents occur every year on new paved roads
- Most serious accidents on roads with high speed + barriers





Sealings made out of bitumen only have caused several fatal and severe accidents. New demands 2018 to improve friction (Kenneth Lind was behind this!)

#### **BLEEDING ASPHALT EXAMPLES 2020**





## ACTIONPLAN TO REDUCE SLIPPERY SUMMER ROADS

- Follow the rules take warnings seriously
- Random control of friction
- Warning signs are used
- SMC: lower speed and close roads if needed until friction is OK
- Present method can miss slippery parts (average 20 meters, less is needed)

The action plan was introduced by the Swedish Transport Administration since several motorcyclists were killed and severly injured 2010-2011 after new asphalt was paved on E4. SMC sued them. The accidents were also in Uppdrag Gransning Swedish Television. UG 13 augusti 2013 **Dödens väg** (one hour)

Sver Noto





Handlingsplan mot låg friktion

Bristande friktion på sommarvägar kan uppstå under arbetet med att lägga ny beläggning, på nylagd väg men även ibland på äldre beläggning.

in rejäl värmebölja kan innebära att bindemedlet njukas upp, utvidgas och stiger upp i vägytan som läckar och blödningar, vilket kan ge en hal vägbana vid rgn. Riskerna ökar vid ihållande värme och snabba ideromalag.

Trafikanterna ska informeras om hala beläggningar främs genom skyltning. Hästigheten kan sättas ned och fräktionshöjande ätgärder sättas in. I de underhåltskonrakt som Trafikverket har ingår en regelbunden tillsyn v vägarna.

Trafikverket har nu tagit fram en handlingsplan mot låg friktion på sommarvägar:

Trafikanter som vill anmåla hala vägar under sommaren hänvisas till Trafikverkets Kundtjänst, som är öppen dygnet runt, tel oppri-921 921. Larm om risk för halka ska alltid as på allvar.

Vid larm om bristande friktion kontaktar Trafikverket reprenören för bedömning om eventuell skyltning och ra åtgärder, i samråd med Trafikverkets projektledare,

ntreprenörens ansvar behöver tydliggöras genom krav på godkännande av yta innan trafiken släpps på innan eventuella skyltar om slirig vägbana tas bort.

a systematiska stickprov. tematisk mätning av vätfatat

lutrustningar ska införas. Sunskapen om friktion, beläggningars hållbarhet, ionsmåtning och åtgärder vid låg friktion behöver ärkas hos beställare, knosk.

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## **TANKBELÄGGNING/INFRÄSNING**

- A big problem when the gravel is on the roads
- Solution: tell riders to take another road
- Don't stop sweeping away the gravel until it is all gone









## **COLLISIONS WITH BARRIERS LEADS TO** FATALITIES AND SEVERLY INJURED



- Hardly any barriers with MPS installed on new roads (about 100 meters since 2015)
- No barriers exchanged after fatalities/severly injured
- In June 2021, the government <u>demanded action</u> from the Swedish Transport Administration regarding barriers – MCinjury risk before 31 October 2021







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## IT IS EASY TO REDUCE THE INJURY RISK WITH BARRIERS!



- Install median and side barriers with a recovery/safety zone from the road side(1,5-2 meters)
- Wider and paved shoulders
- Always choose forgiving road sides instead of side barriers
- Choose rumble strips where possible
- Remove barriers that has no function

Barrier with MPS,TPL Ljungarum – test by Trafikverket, finalized 2015







#### **THANKS FOR INVITING ME!**



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