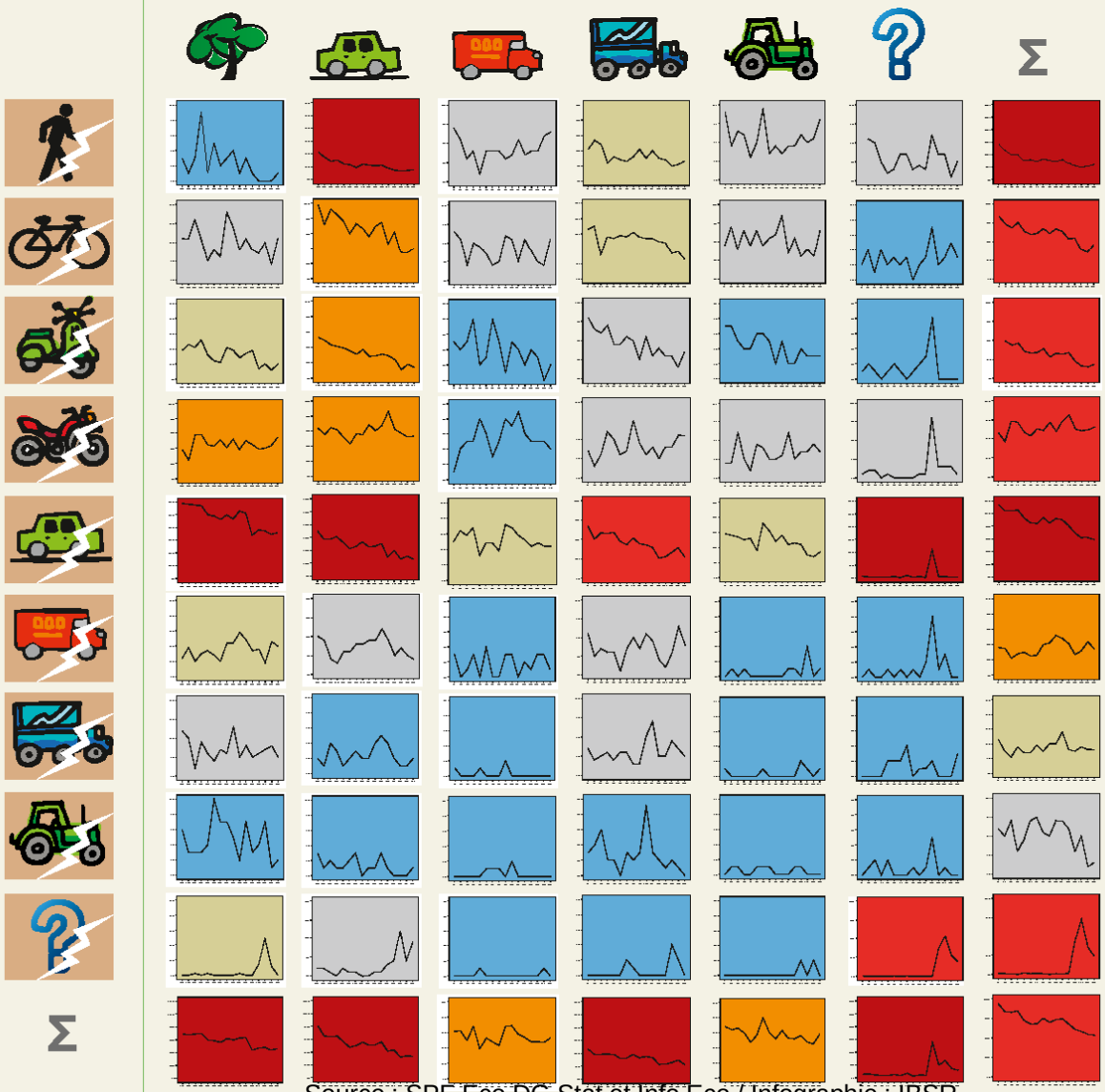
Two-wheeler accidents in Belgium

Heike Martensen & Yvan Casteels



Belgian Crash Matrix
Fatalities 1991-2006



Conflicttypes
201-600
101-200
51-100
21-50
11-20
5-10

Randsommen
801-1200
301-800
201-300
101-200
51-100
50



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Belgian Crash Matrix
Fatalities 1991-2006



Conflicttypes
201-600
101-200
51-100
21-50
11-20
5-10

Randsommen
801-1200
301-800
201-300
101-200
51-100
50



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Belgian Crash Matrix
Fatalities 1991-2006



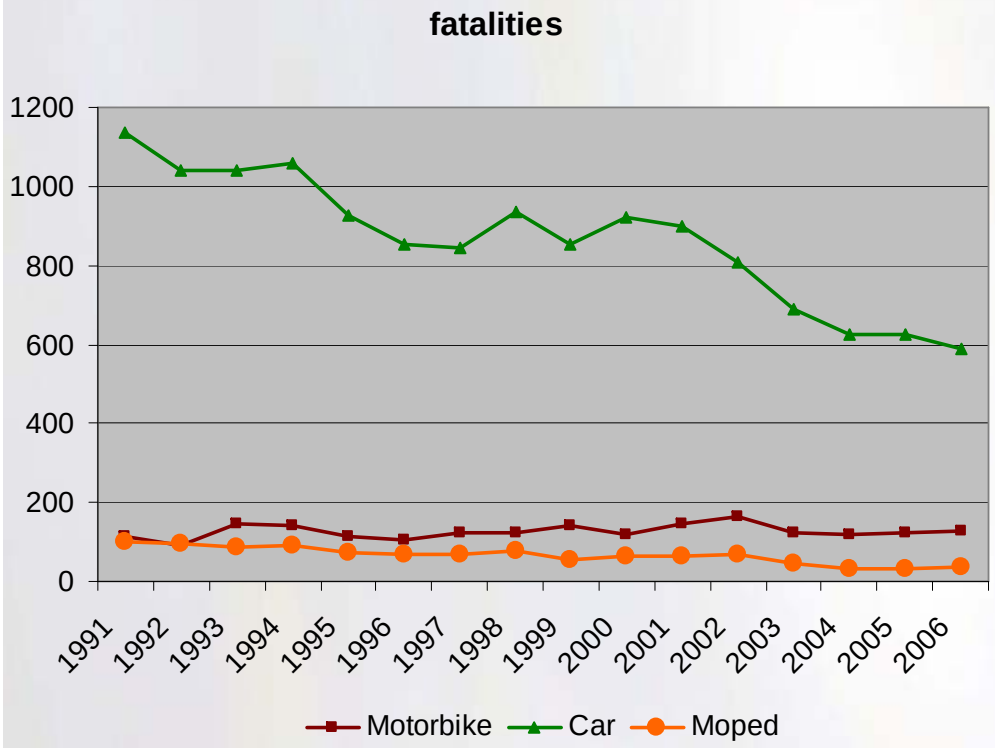
Conflicttypes
201-600
101-200
51-100
21-50
11-20
5-10

Randsommen
801-1200
301-800
201-300
101-200
51-100
50



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

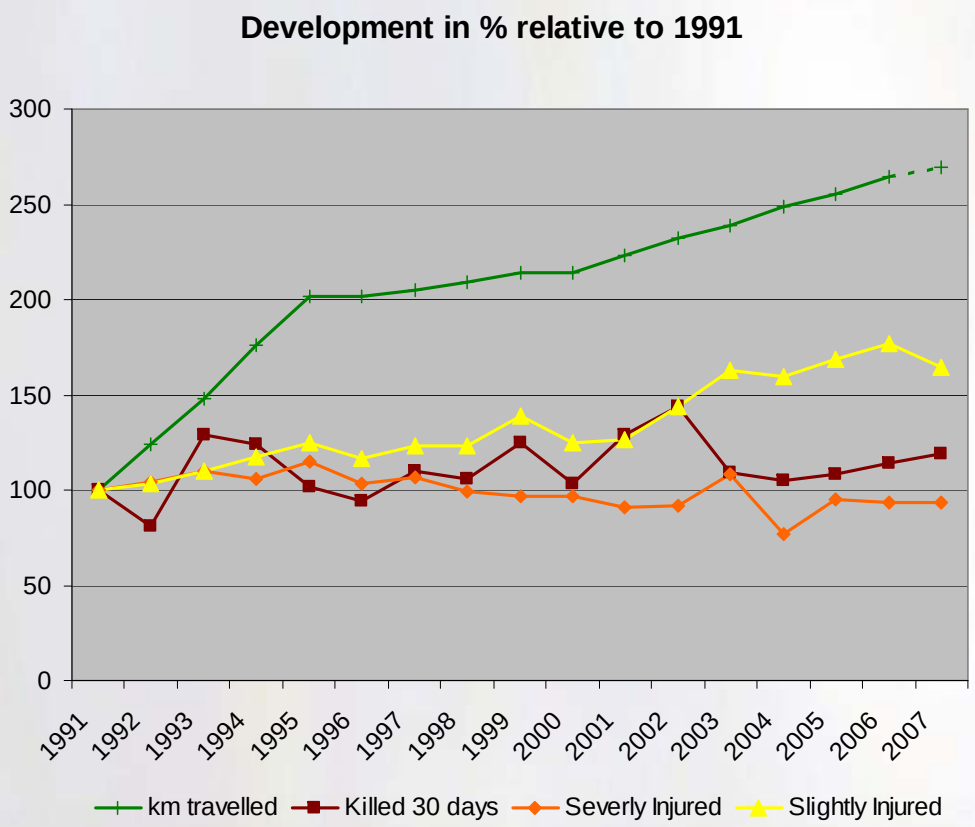
Belgian Crash Matrix 1991-2006



- Victimes among motorcyclists and moped riders constitute a substantial part of the fatalities in Belgium.
- The number of fatalities among motorcyclists is rising.
- The number of fatalities among moped riders is falling.



Development of motorcycle victims

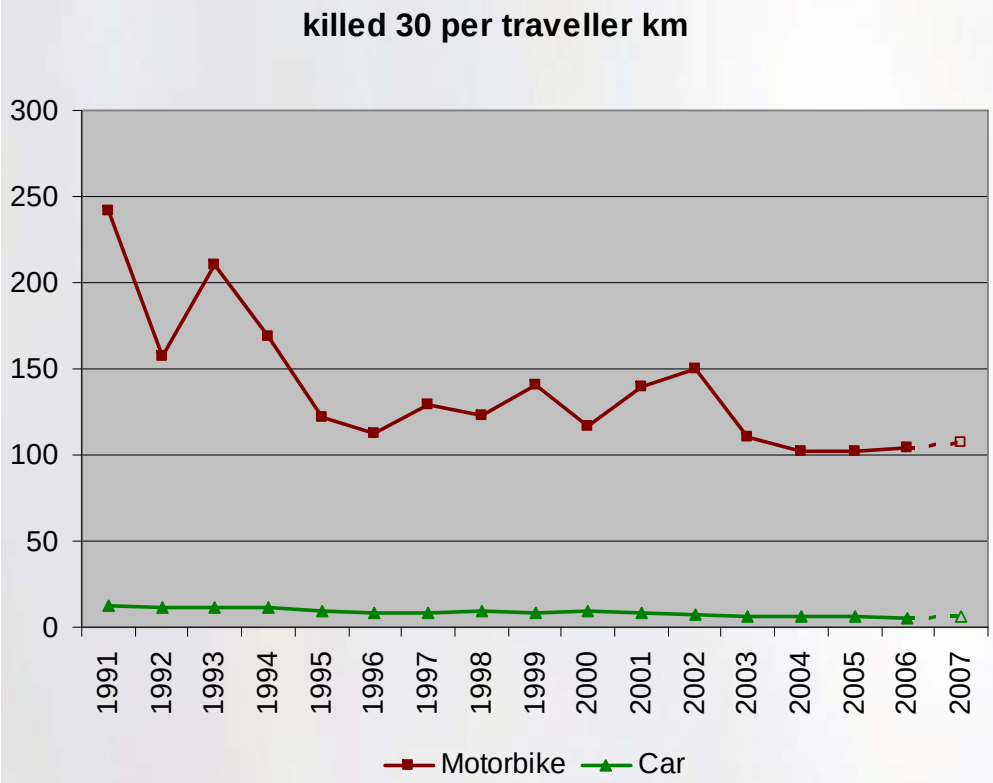


- Increase in victim numbers
  - strongest for slightly injured victims
  - number of killed and severly injured victims more or less constant.
- Strong increase in vehicle km.
  - Increase in victims is smaller than increase in vehicle km.
  - > decrease of risk per km travelled.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Killed occupants/riders per km travelled

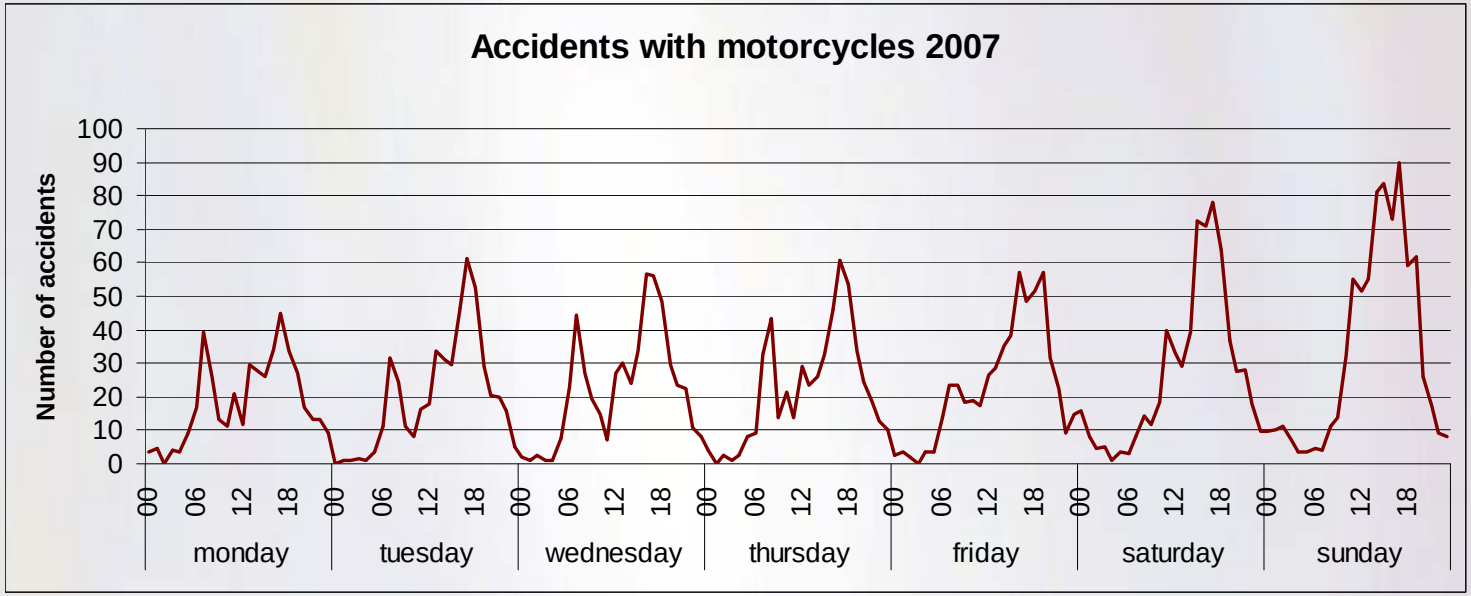


- The risk for motorcylists (fatalities per billion km travelled) is almost 20 times higher than for car occupants.
- The risk has been decreasing until 2004 and seems to be stagnating now.



Source : SPF Eco DG Stat et Info Eco & SPF mobilité / Infographie : IBSR

Time and day of the week: Motorcycles

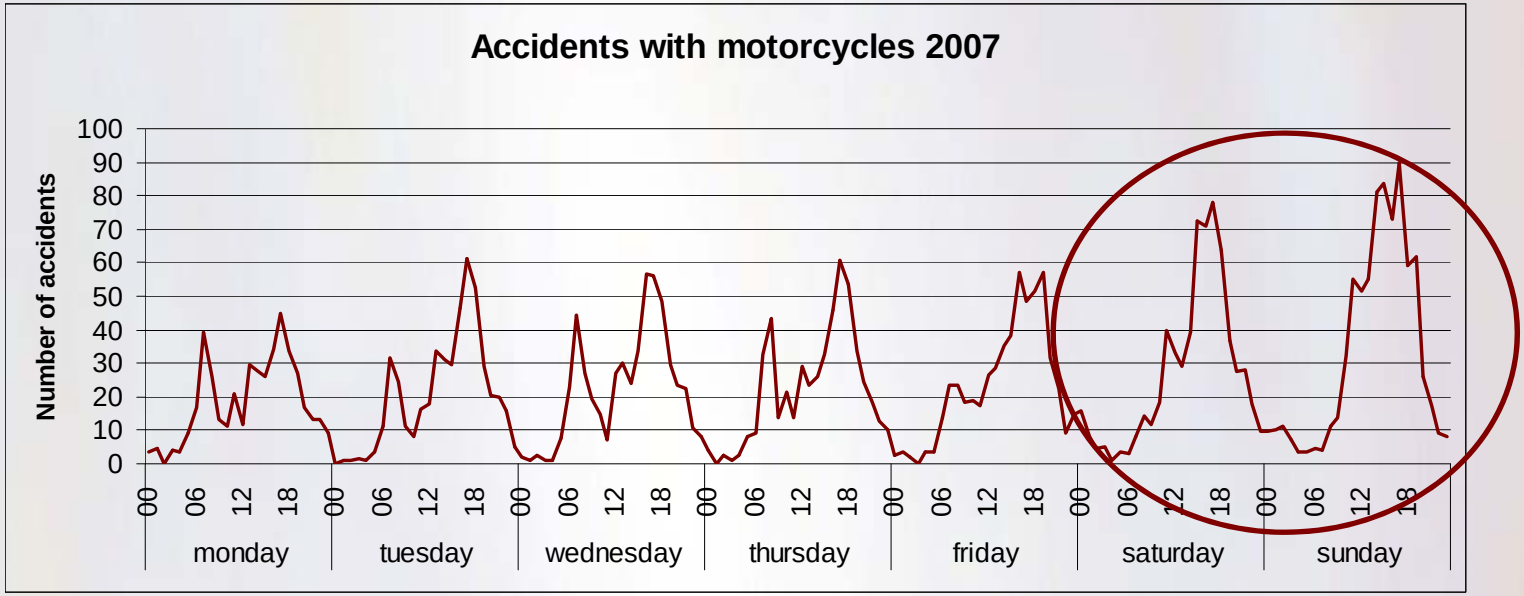


- More victims on weekend days than on weekdays.
- During the week, most victims during rush-hour (more in the evening than in the morning).
- During weekend: most victims in the afternoon.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Time and day of the week: Motorcycles

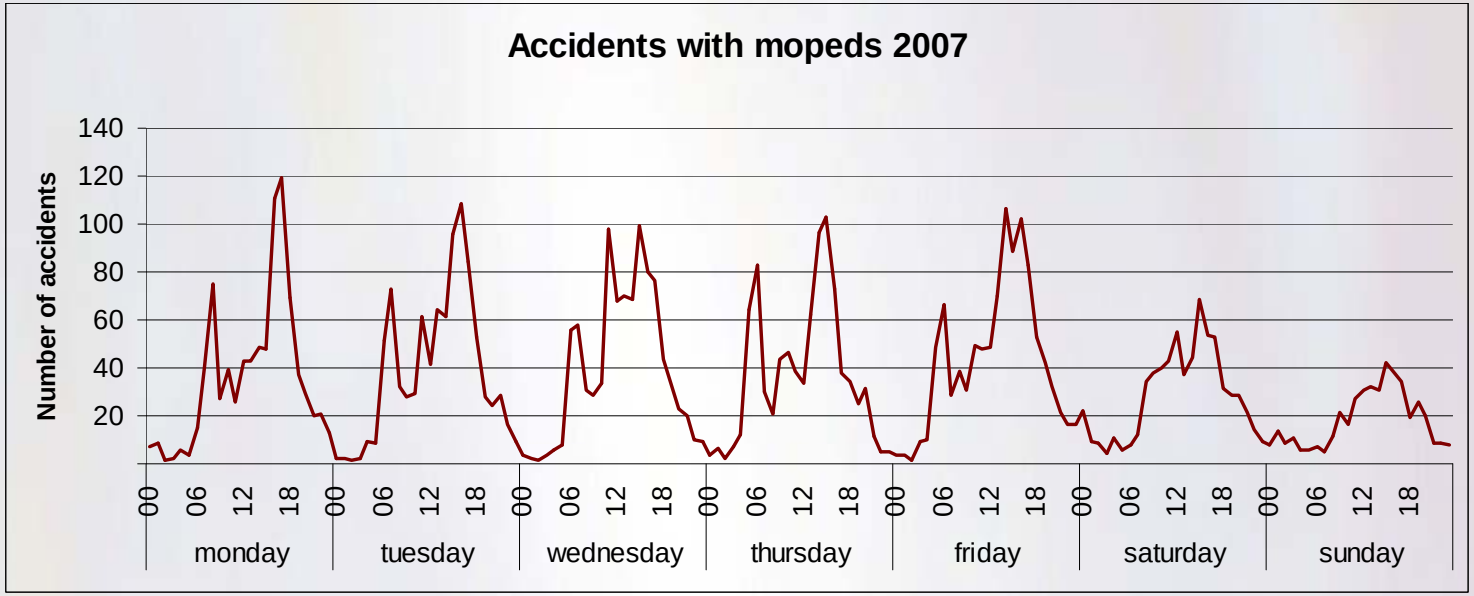


- More victims on weekend days than on weekdays.
- During the week, most victims during rush-hour (more in the evening than in the morning).
- During weekend: most victims in the afternoon.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Time and day of the week: Mopeds

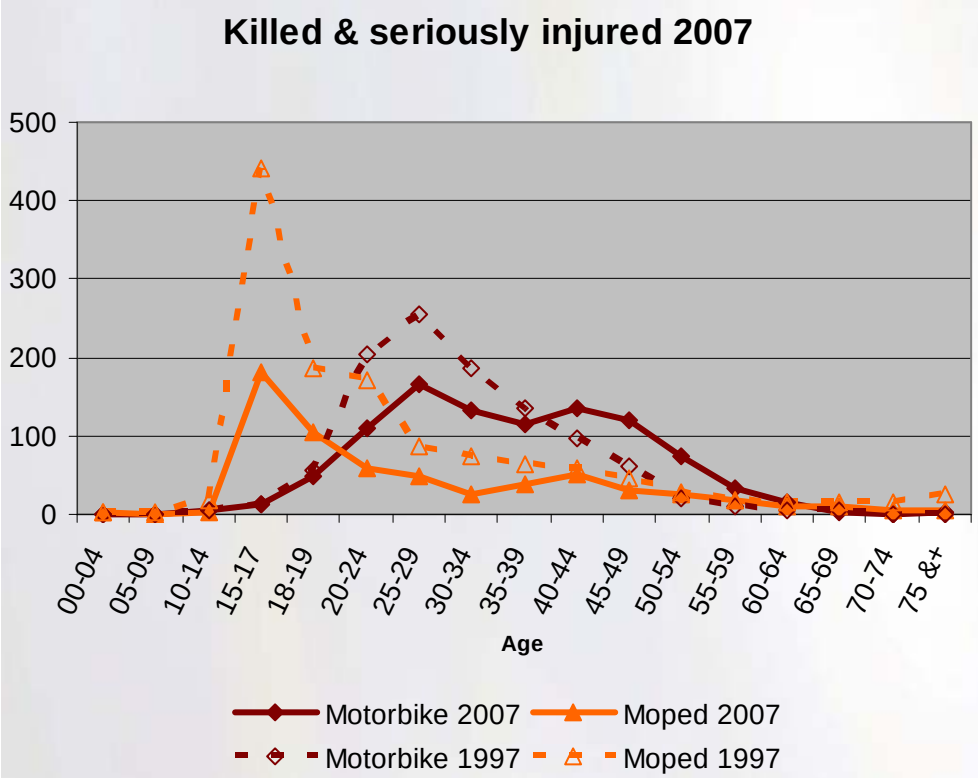


- More victims on weekdays than in the weekend.
- During the week, most victims during rush-hour (school start and end?) except on wednesday afternoons.
- During weekend: most victims in the afternoon.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Killed and seriously injured per age group

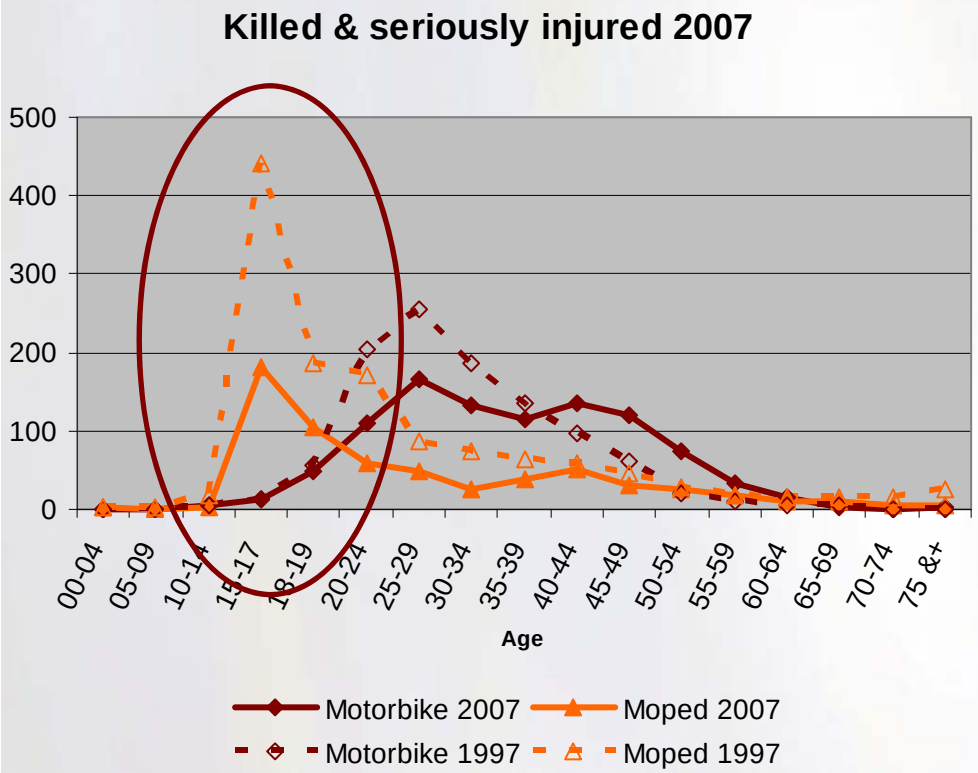


- Moped victims
  - peak during teenage years and few victims among older age groups.
  - decrease in numbers during last 10 years
  - pattern across age groups remains the same.
- Motorcycle victims
  - (peak between 20 and 30.)
  - decrease among young adults
  - increase among older adults
  - in 2007 almost even distribution between 20 and 50.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Killed and seriously injured per age group

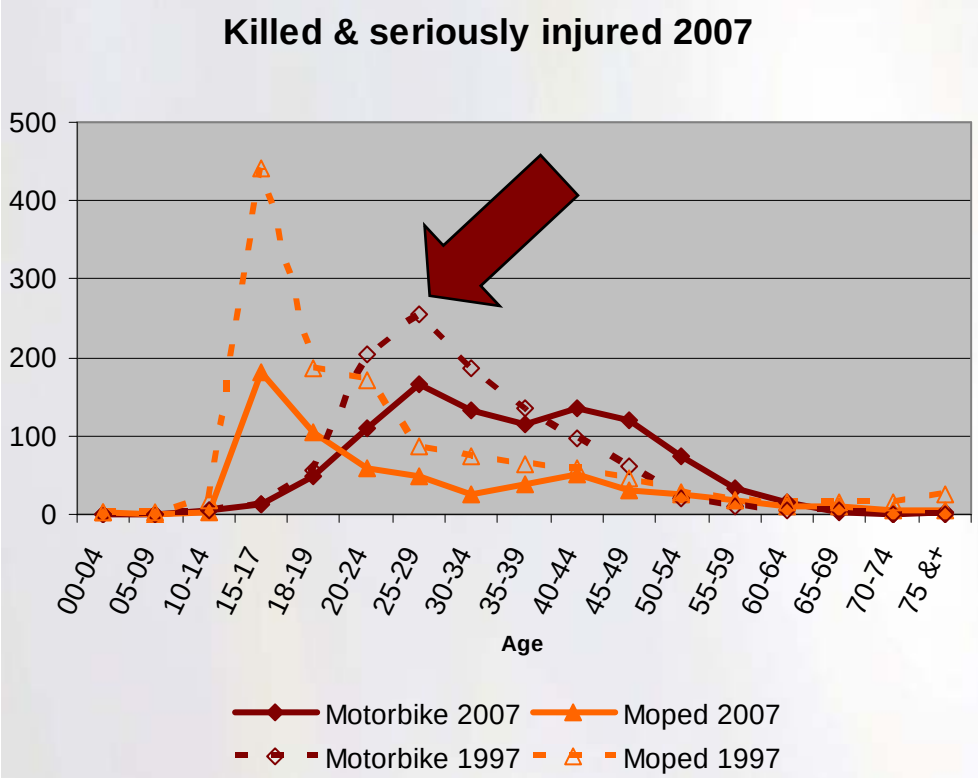


- Moped victims
  - peak during teenage years and few victims among older age groups.
  - decrease in numbers during last 10 years
  - pattern across age groups remains the same.
- Motorcycle victims
  - (peak between 20 and 30.)
  - decrease among young adults
  - increase among older adults
  - in 2007 almost even distribution between 20 and 50.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Killed and seriously injured per age group

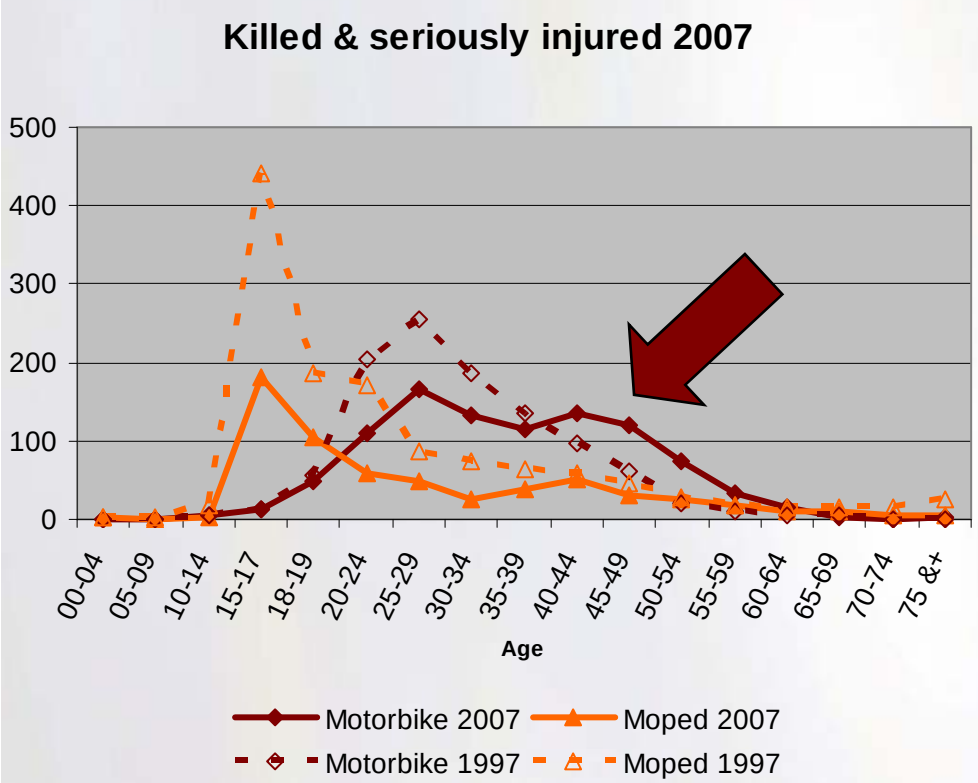


- Moped victims
  - peak during teenage years and few victims among older age groups.
  - decrease in numbers during last 10 years
  - pattern across age groups remains the same.
- Motorcycle victims
  - (peak between 20 and 30.)
  - decrease among young adults
  - increase among older adults
  - in 2007 almost even distribution between 20 and 50.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Killed and seriously injured per age group

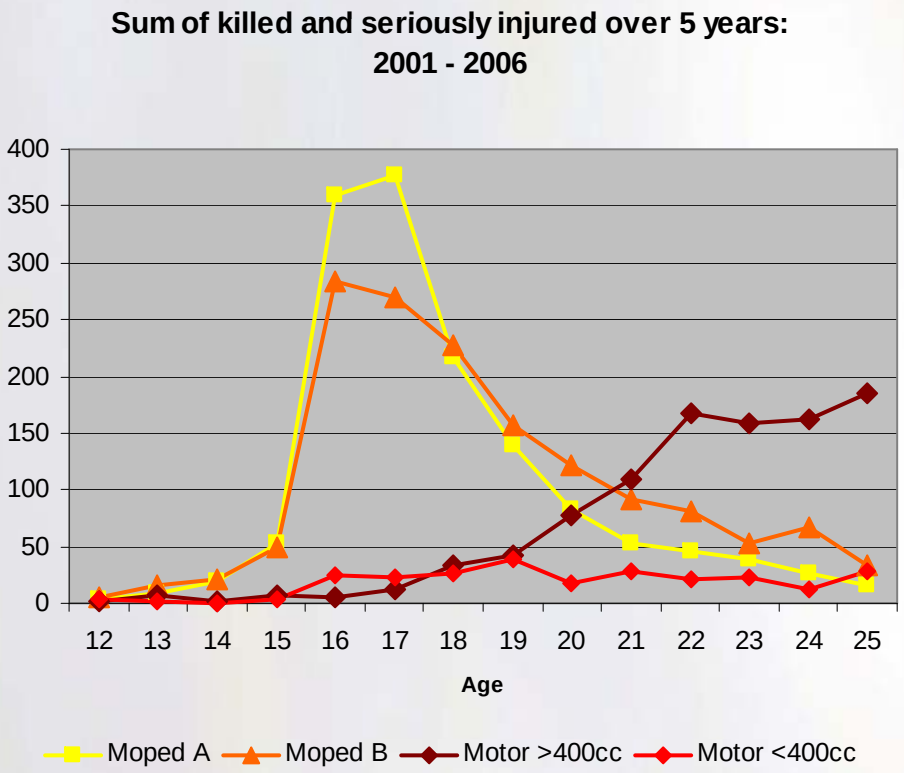


- Moped victims
  - peak during teenage years and few victims among older age groups.
  - decrease in numbers during last 10 years
  - pattern across age groups remains the same.
- Motorcycle victims
  - (peak between 20 and 30.)
  - decrease among young adults
  - increase among older adults
  - in 2007 almost even distribution between 20 and 50.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Age and type of vehicle in detail

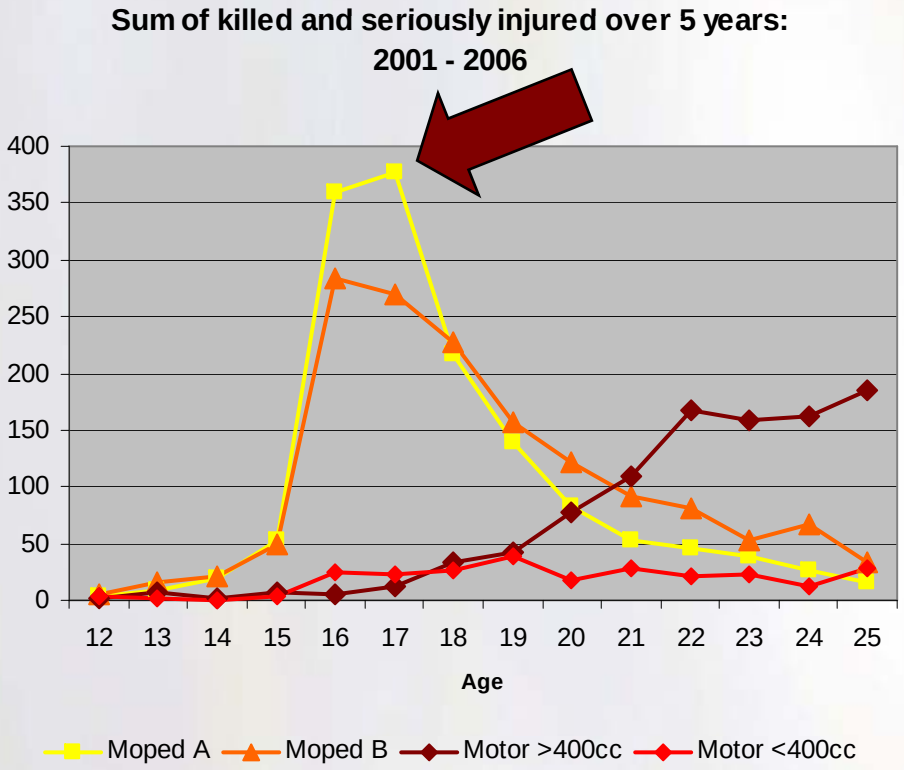


- Moped A (max 25kmh): Permitted to ride without license
  - Teenagers (15-19) riding moped A constitute the majority of the moped victims.
- Moped B (max 40kmh): Theoretical and practical examen required
  - Fewer victims than moped A, same age-pattern.
- Small Motorcycles (<400cc)
  - More victims than large motorcycles between 16 and 17 but generally few victims.
- Large Motorcycles (>400cc)
  - Number of victims increases steadily from 17 years on.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Age and type of vehicle in detail

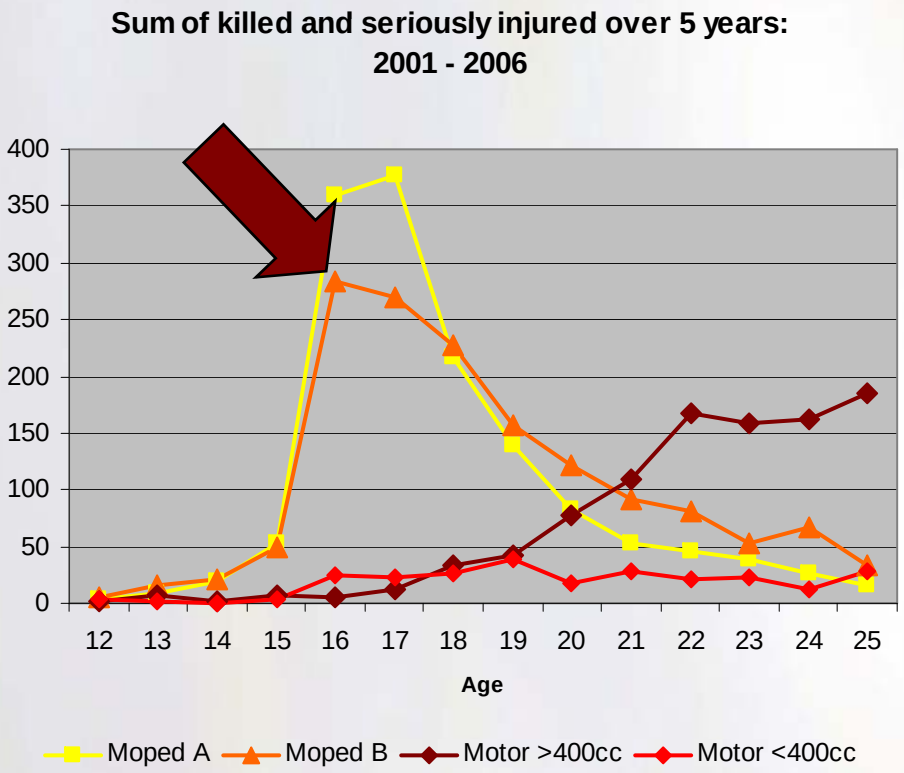


- Moped A (max 25kmh): Permitted to ride without license
  - Teenagers (15-19) riding moped A constitute the majority of the moped victims.
- Moped B (max 40kmh): Theoretical and practical examen required
  - Fewer victims than moped A, same age-pattern.
- Small Motorcycles (<400cc)
  - More victims than large motorcycles between 16 and 17 but generally few victims.
- Large Motorcycles (>400cc)
  - Number of victims increases steadily from 17 years on.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Age and type of vehicle in detail

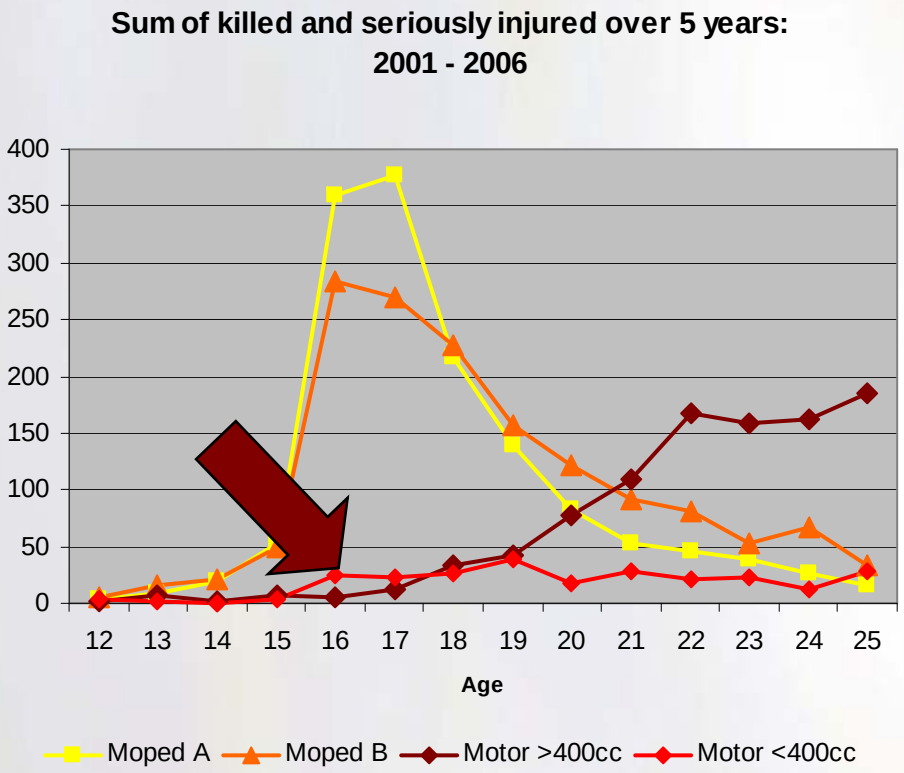


- Moped A (max 25kmh): Permitted to ride without license
  - Teenagers (15-19) riding moped A constitute the majority of the moped victims.
- Moped B (max 40kmh): Theoretical and practical examen required
  - Fewer victims than moped A, same age-pattern.
- Small Motorcycles (<400cc)
  - More victims than large motorcycles between 16 and 17 but generally few victims.
- Large Motorcycles (>400cc)
  - Number of victims increases steadily from 17 years on.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Age and type of vehicle in detail



- Moped A (max 25kmh): Permitted to ride without license
  - Teenagers (15-19) riding moped A constitute the majority of the moped victims.
- Moped B (max 40kmh): Theoretical and practical examen required
  - Fewer victims than moped A, same age-pattern.
- Small Motorcycles (<400cc)
  - More victims than large motorcycles between 16 and 17 but generally few victims.
- Large Motorcycles (>400cc)
  - Number of victims increases steadily from 17 years on.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Children on motorbikes?



This is me with my youngest. By now she is a bit older and I have a larger machine ... but I still remember these times fondly.

- In 2006 and 2007 in Belgium:
- 1 child (0-9 years) killed
- 6 children severly injured
- 17 children slightly injured



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Children on motorbikes?



This is me with my youngest. By now she is a bit older and I have a larger machine ... but I still remember these times fondly.



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

Summary Motorcycles

- The number of motorcycle accidents and victims has been increasing.
- The risk per km travelled has been decreasing until 2004 and is now stagnating.
- Motorcycle accidents are particularly frequent in urban areas and more often on weekend days than on weekdays.
- Motorcycle accident have always involved many young people but recently there was a shift towards older riders.



Summary Mopeds

- The number of moped accidents and victims has been decreasing since 1991.
- Moped accidents involve mostly teenagers and are relatively infrequent among older persons.
- The majority of the moped accidents happens with Type A mopeds that do not require a licence to be ridden.

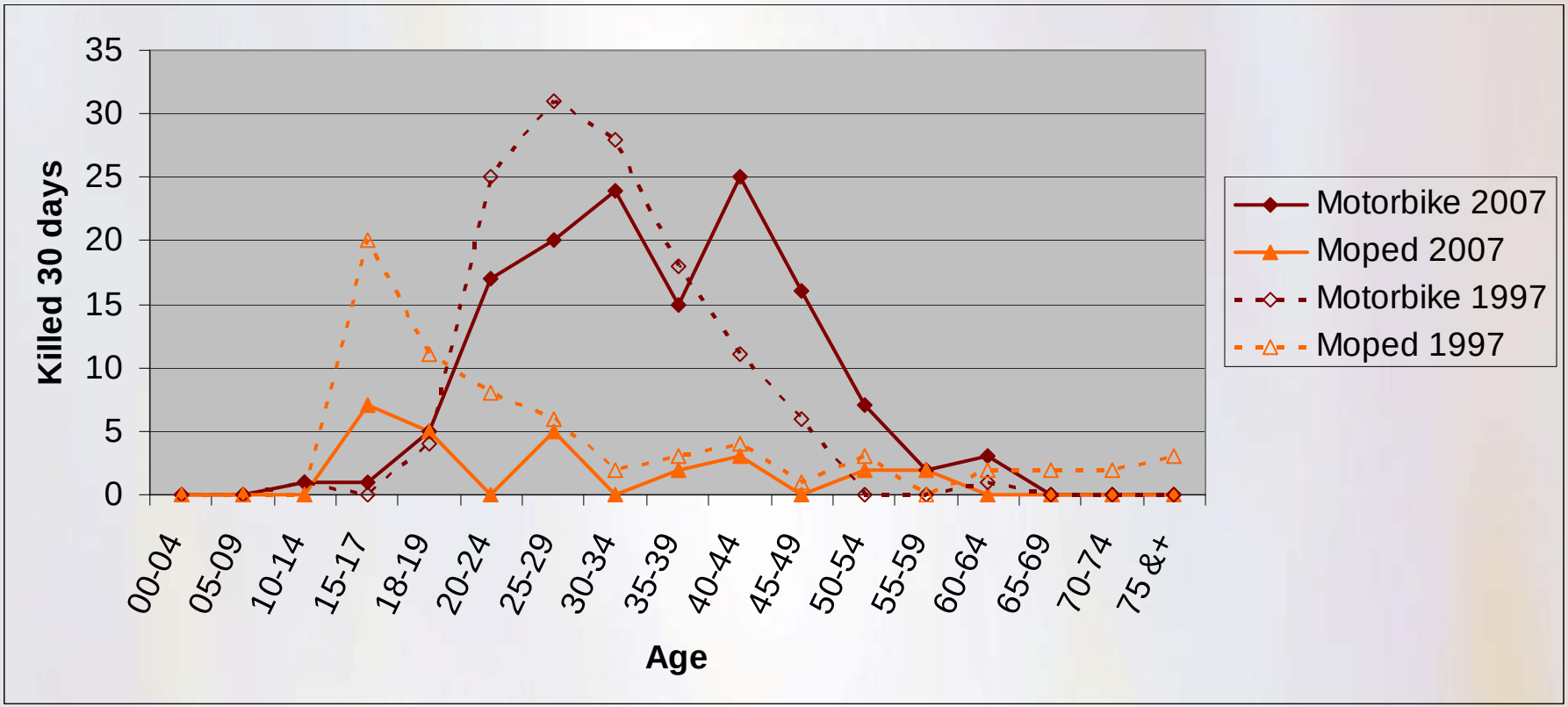


IBSR-BIVV

Thank you for your attention



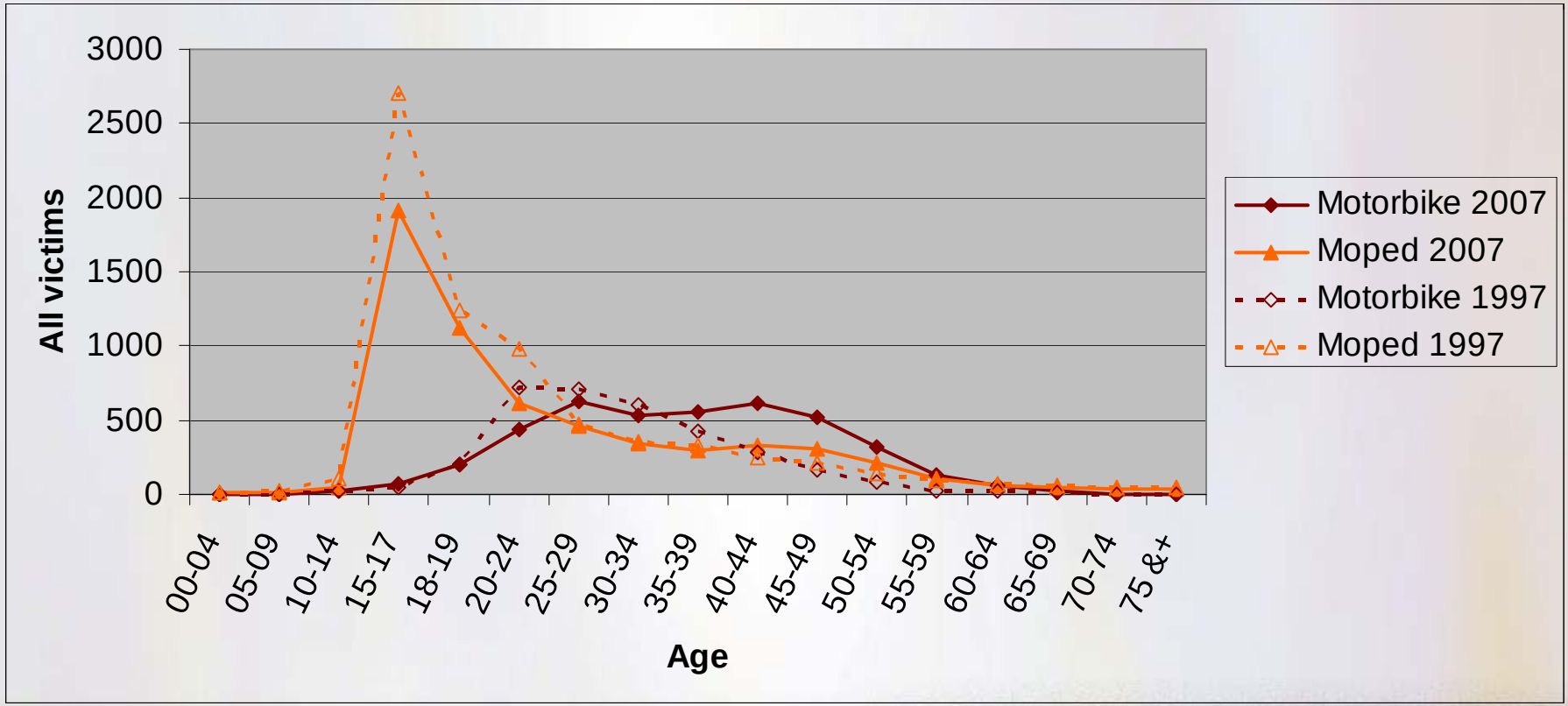
Killed 30 days per age group



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR



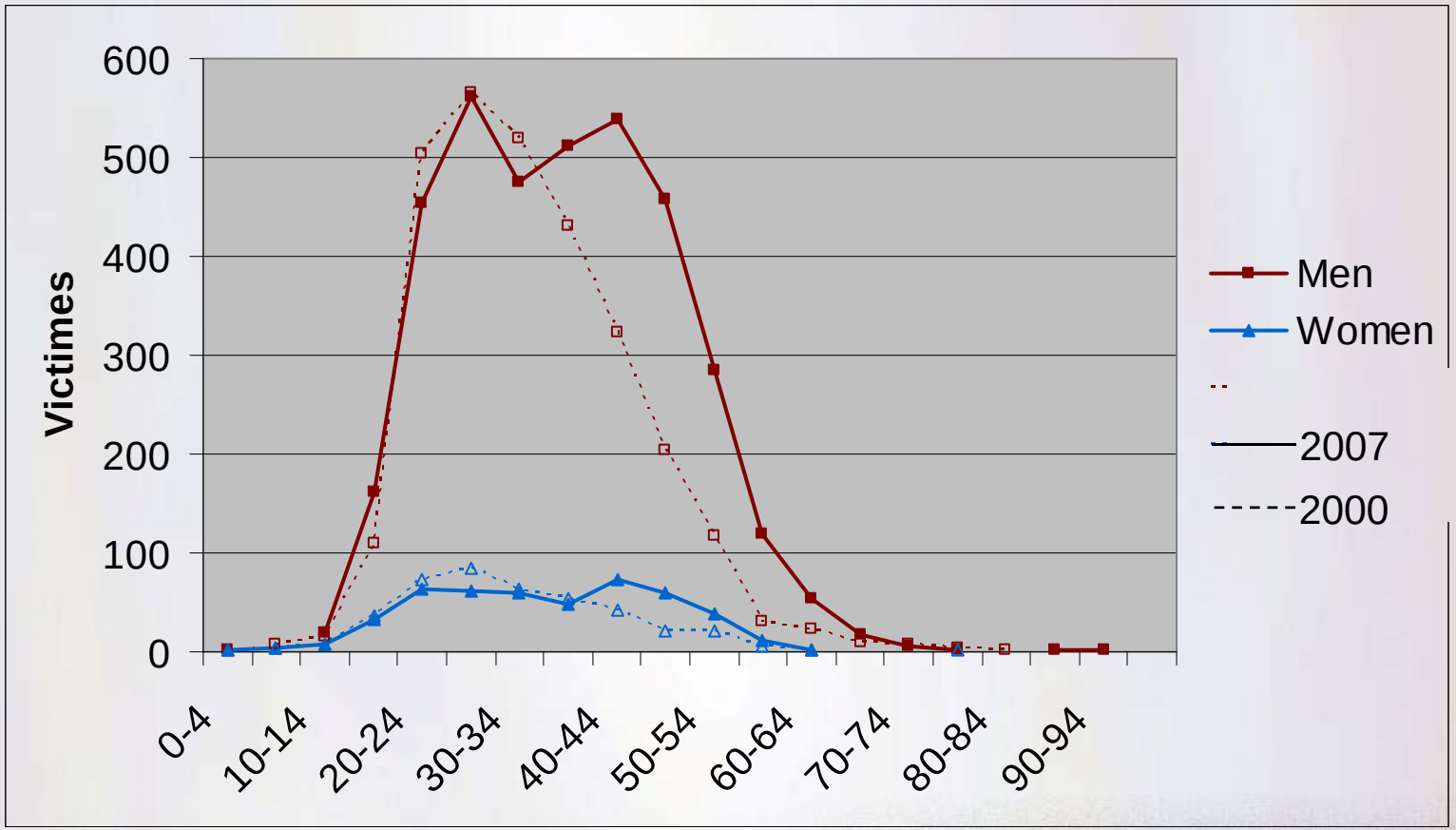
All victims per age group



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

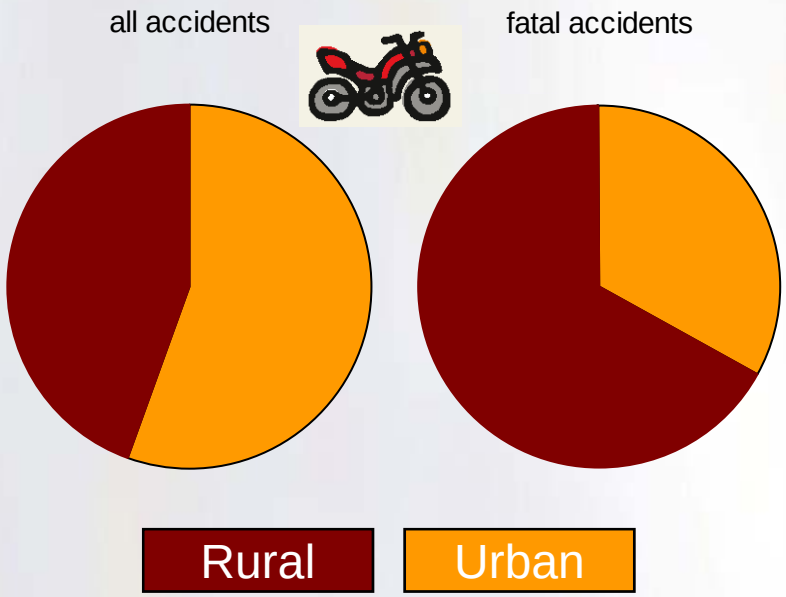


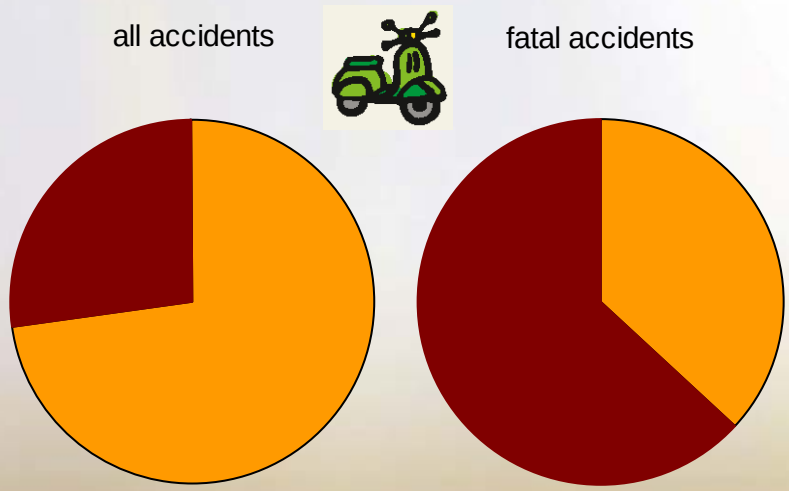
Victims among motorcyclists per age group





Location: Rural vs. Urban area



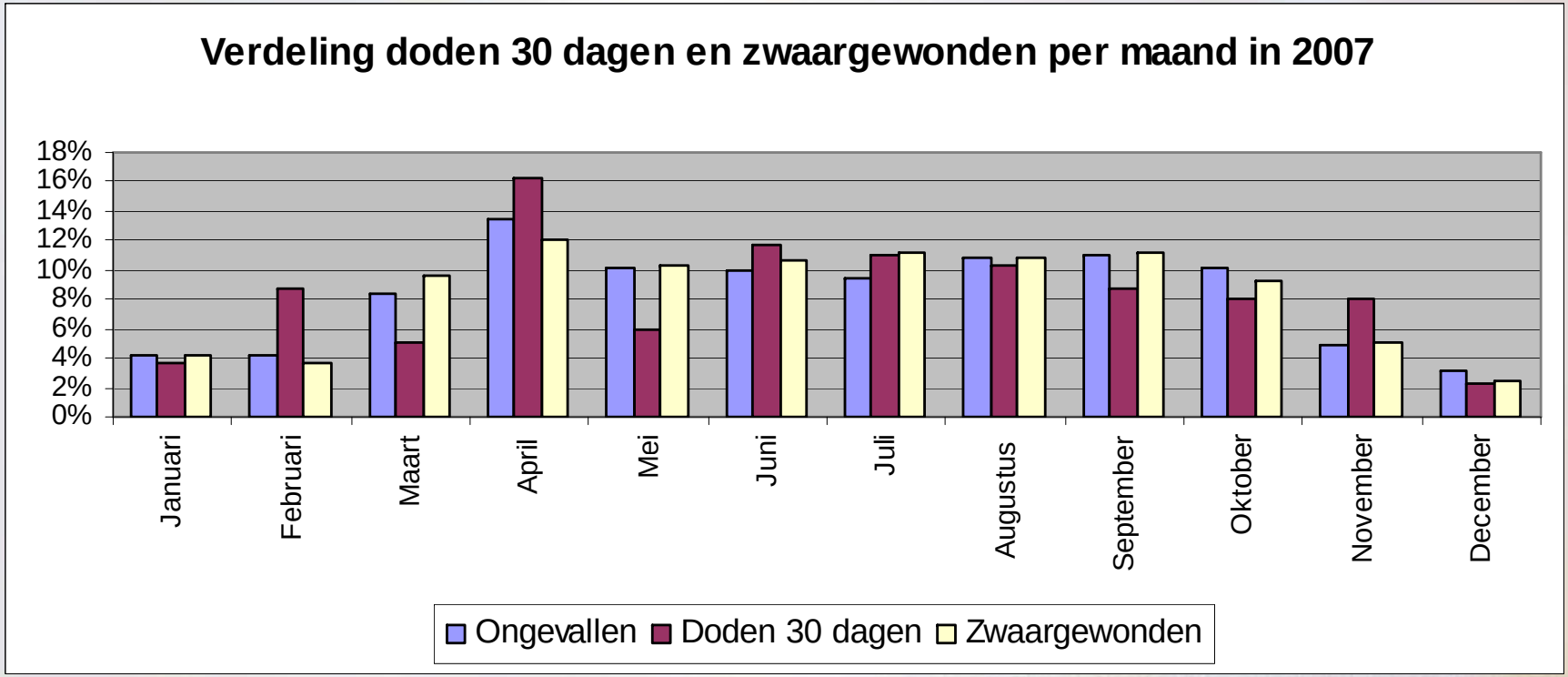


Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR

- Accidents involving motorcycles or mopeds are more frequent in urban areas.
- ... but more fatal in rural areas.



Distribution over the year



Source : SPF Eco DG Stat et Info Eco / Infographie : IBSR



Killed occupants/riders per km travelled

- **IBSR**
- Killed motorcyclists
  - 130
- Killed mopedists
  - 35
- Billions km travelled (FOD mobility: motorcycles)
  - 1.25
- Killed motorcyclists per km travelled
  - 106

- **ETSC**
- Killed PTW riders in 2005:
  - 148
- Billions km travelled by motorcycles in 2005 (Eurostat):
  - 1.083
- Killed motorcyclists per km travelled in 2005:
  - 137

