



Alcohol and Seat Belt Use in Fatal Crashes

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Quick Facts

- In 2008, 54% of drivers killed were not wearing a seat belt.
- In 2008, 38% of drivers killed had a positive BAC,
- Situation is even worse at night.

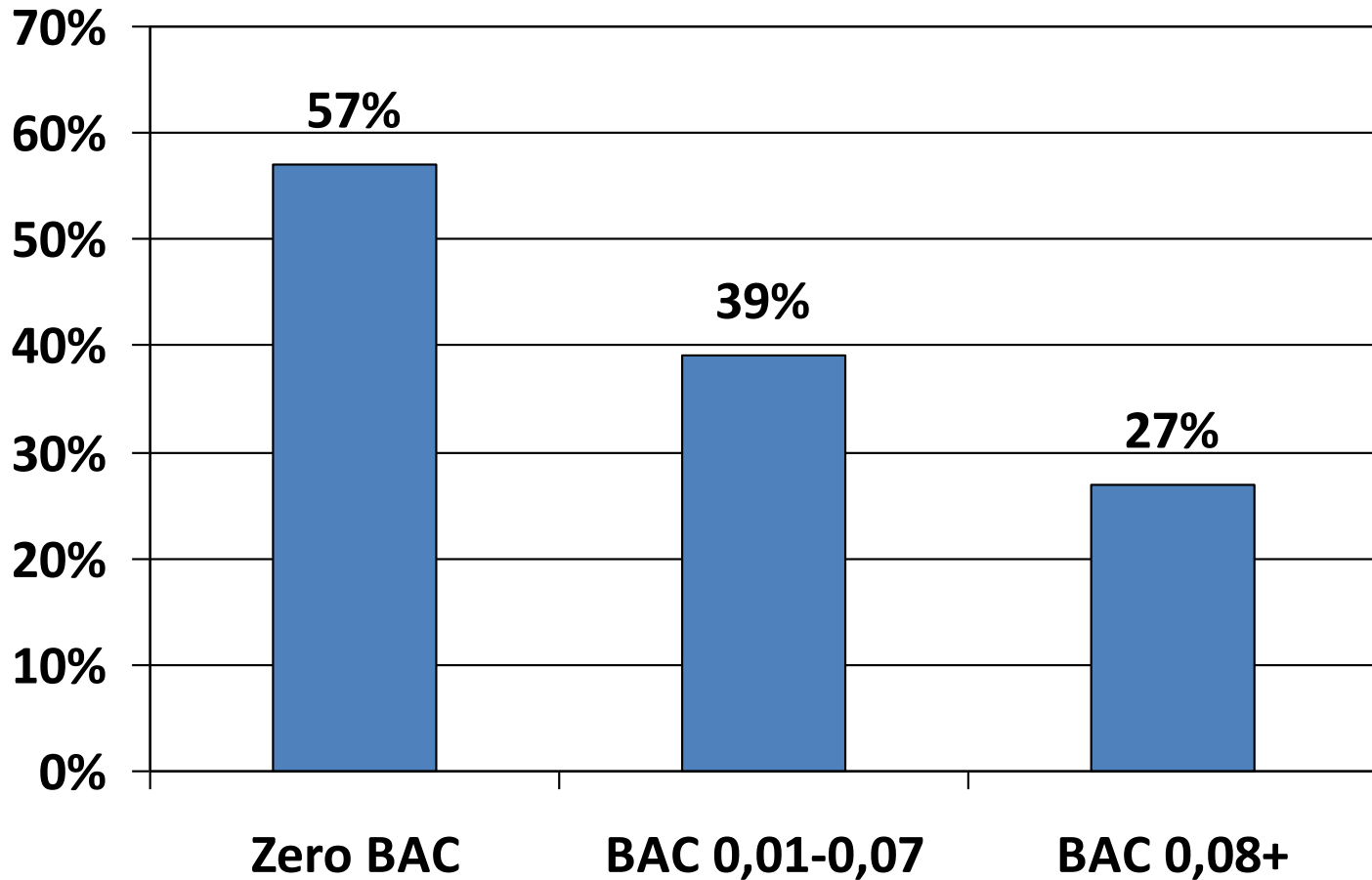
Day and Night

- Decrease in belt use from day to night:
 - 52% of drivers killed in *daytime* are belted
 - 32% of drivers killed at *night* are belted.
- Increase in alcohol involvement from day to night:
 - 25% of drivers killed in *daytime* have a BAC $\geq 0,01$
 - 69% of drivers killed at *night* have a BAC $\geq 0,01$.

So, at Night...

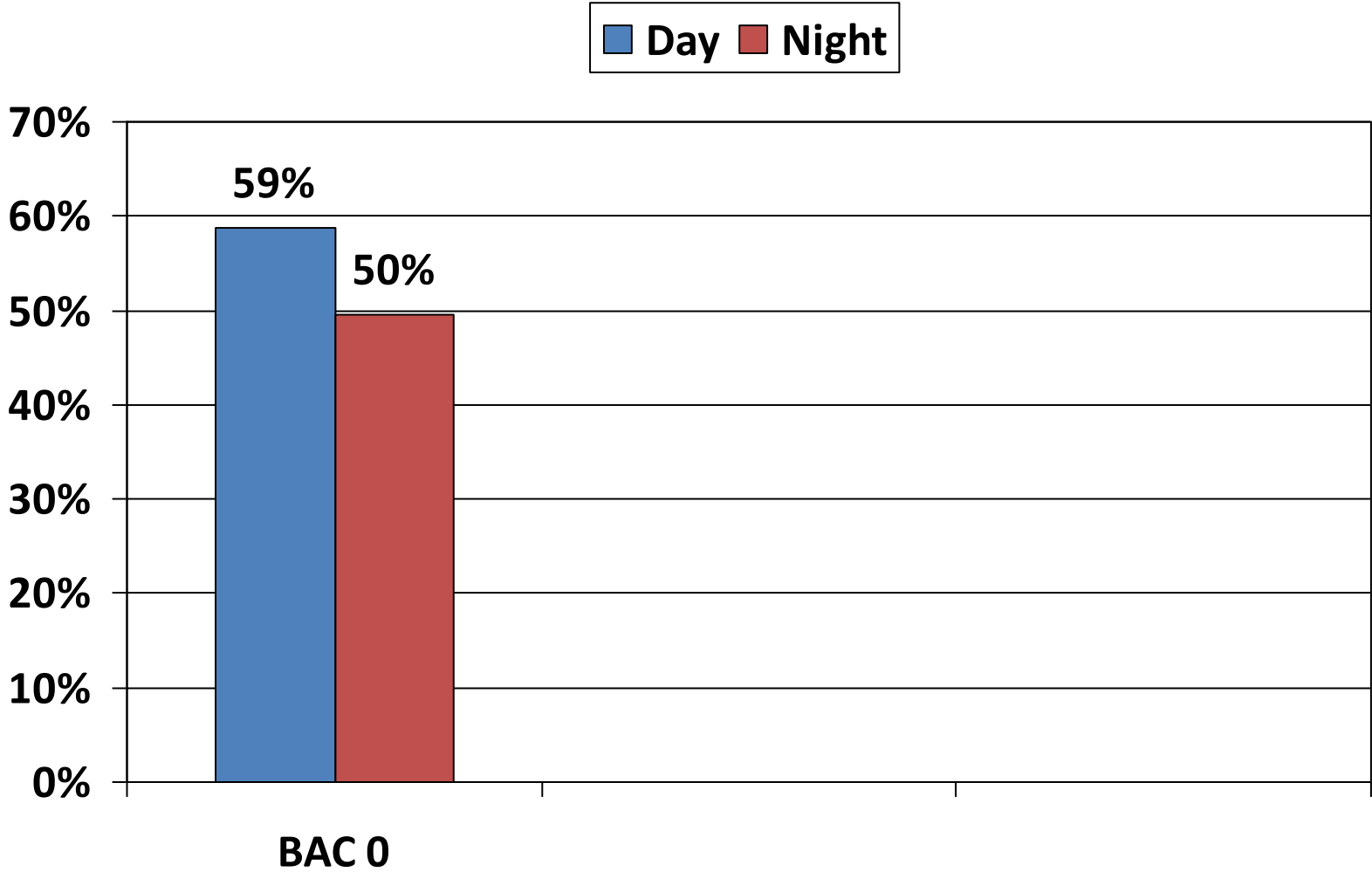
- Belt use is low.
- Alcohol involvement is high.
 - Are these two distinct groups?
- Do drinking drivers have lower belt use than non-drinking drivers?

Percent Belted by BAC

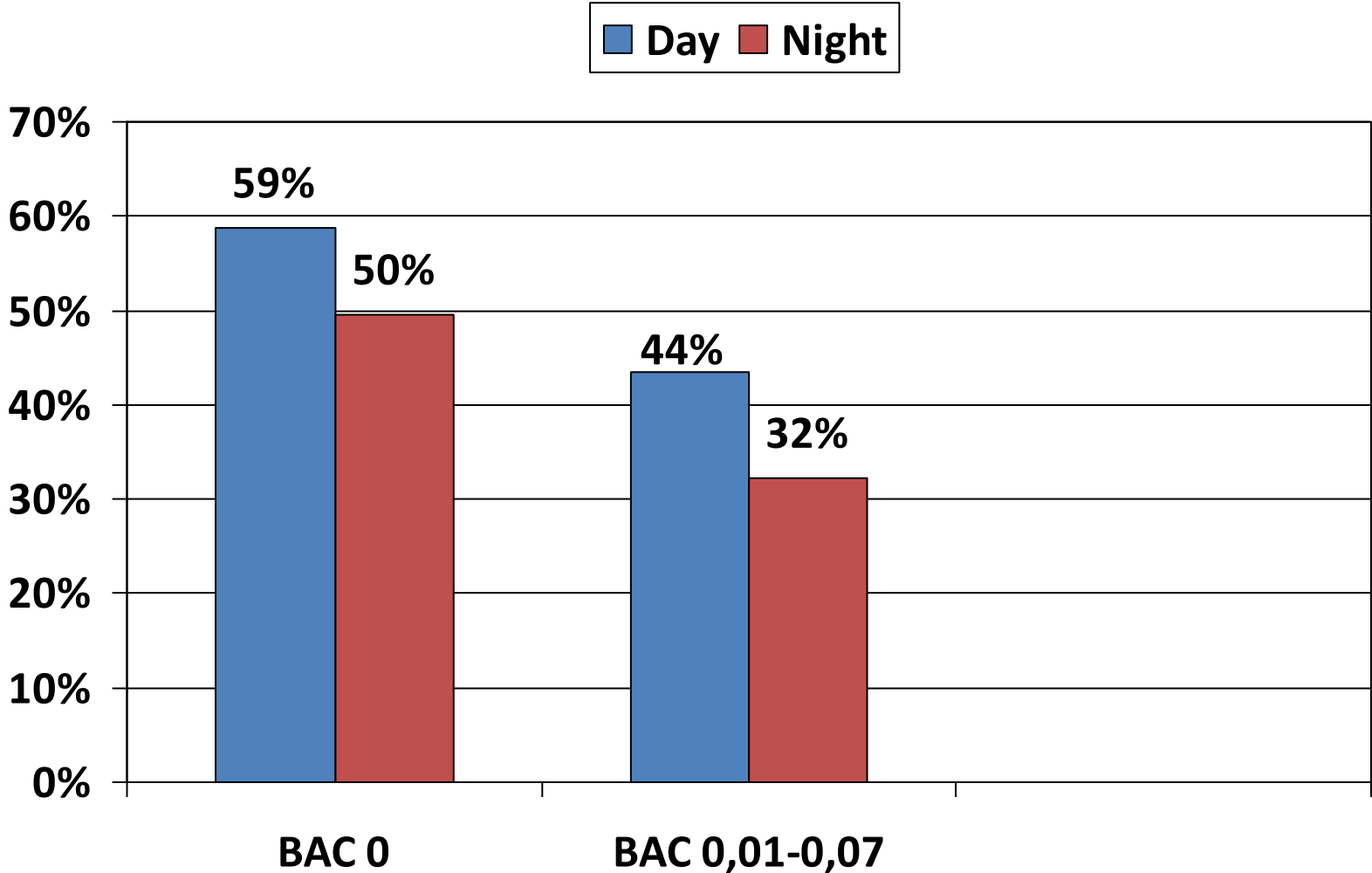


Source: FARS 2008

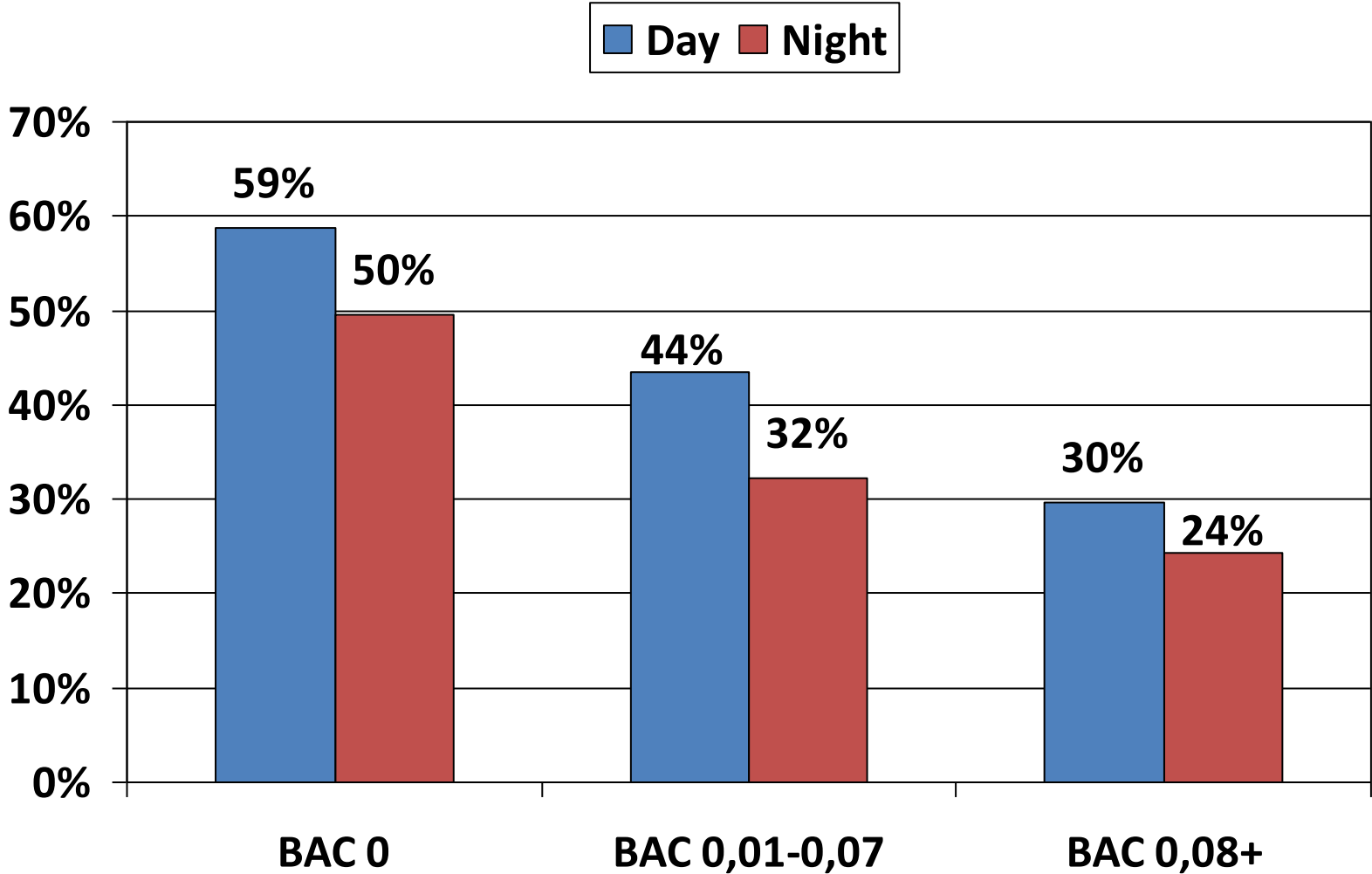
Day and Night Belt Use by BAC



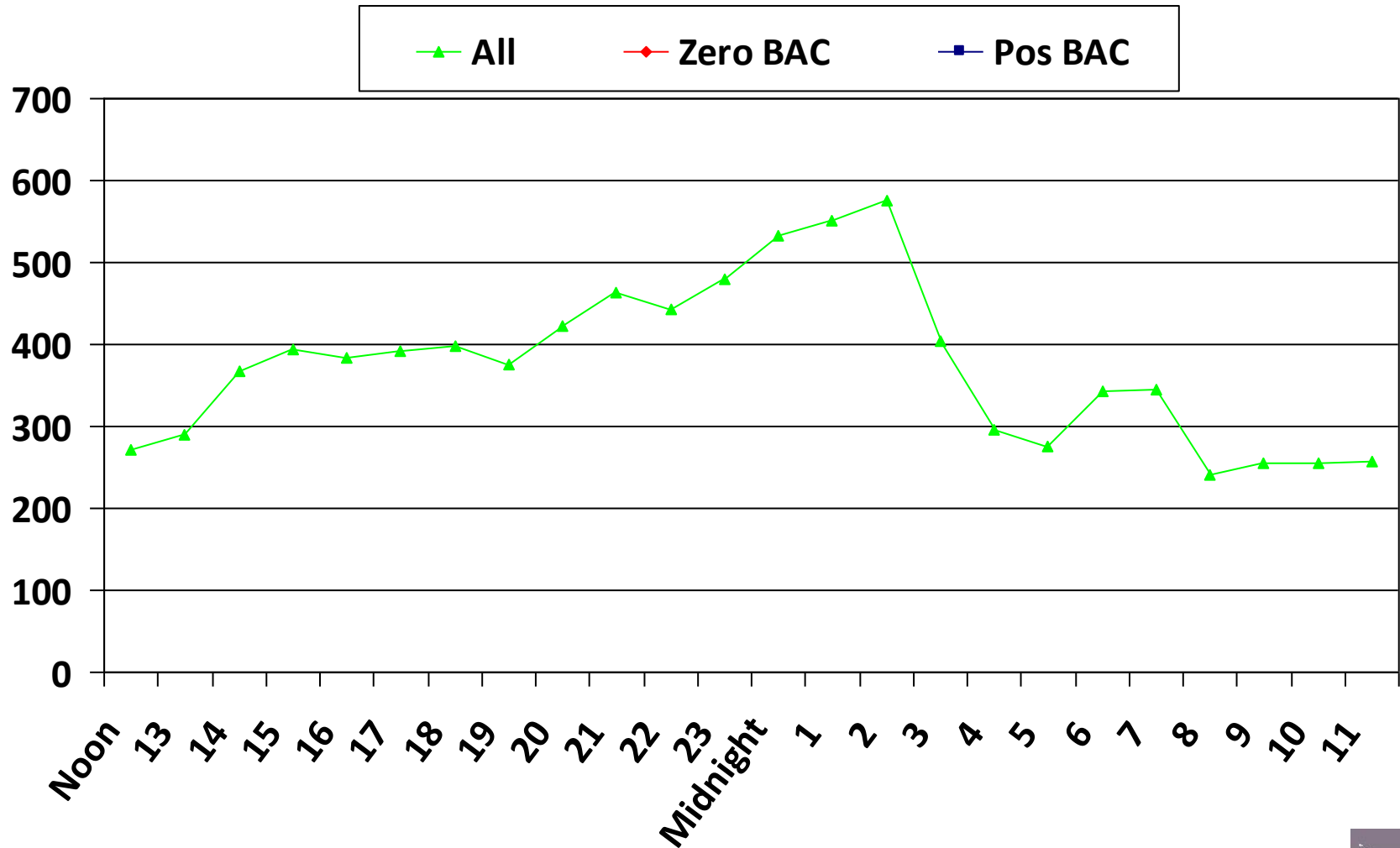
Day and Night Belt Use by BAC



Day and Night Belt Use by BAC



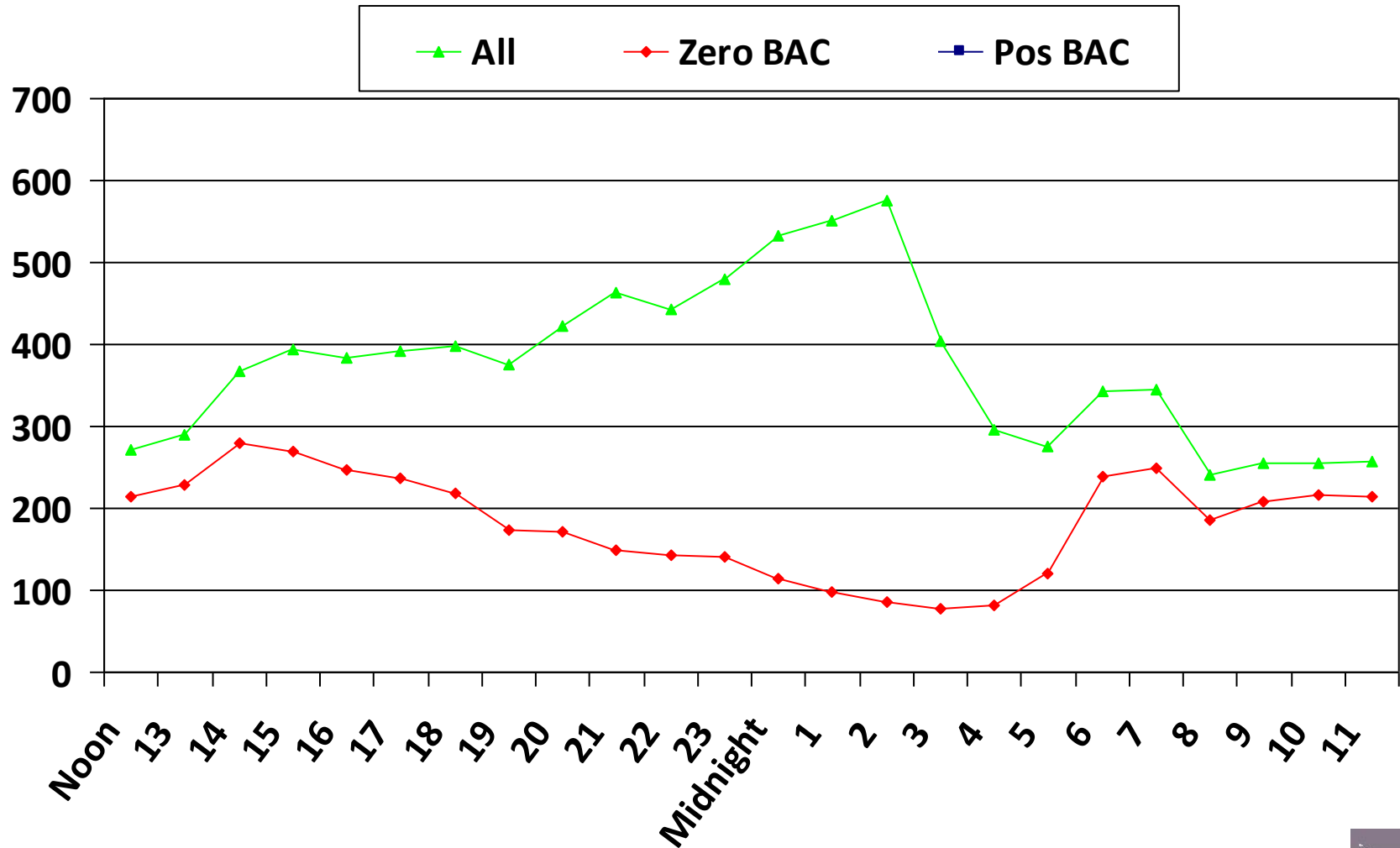
N Unbelted Fatalities by Time of Day



Source: FARS 2008



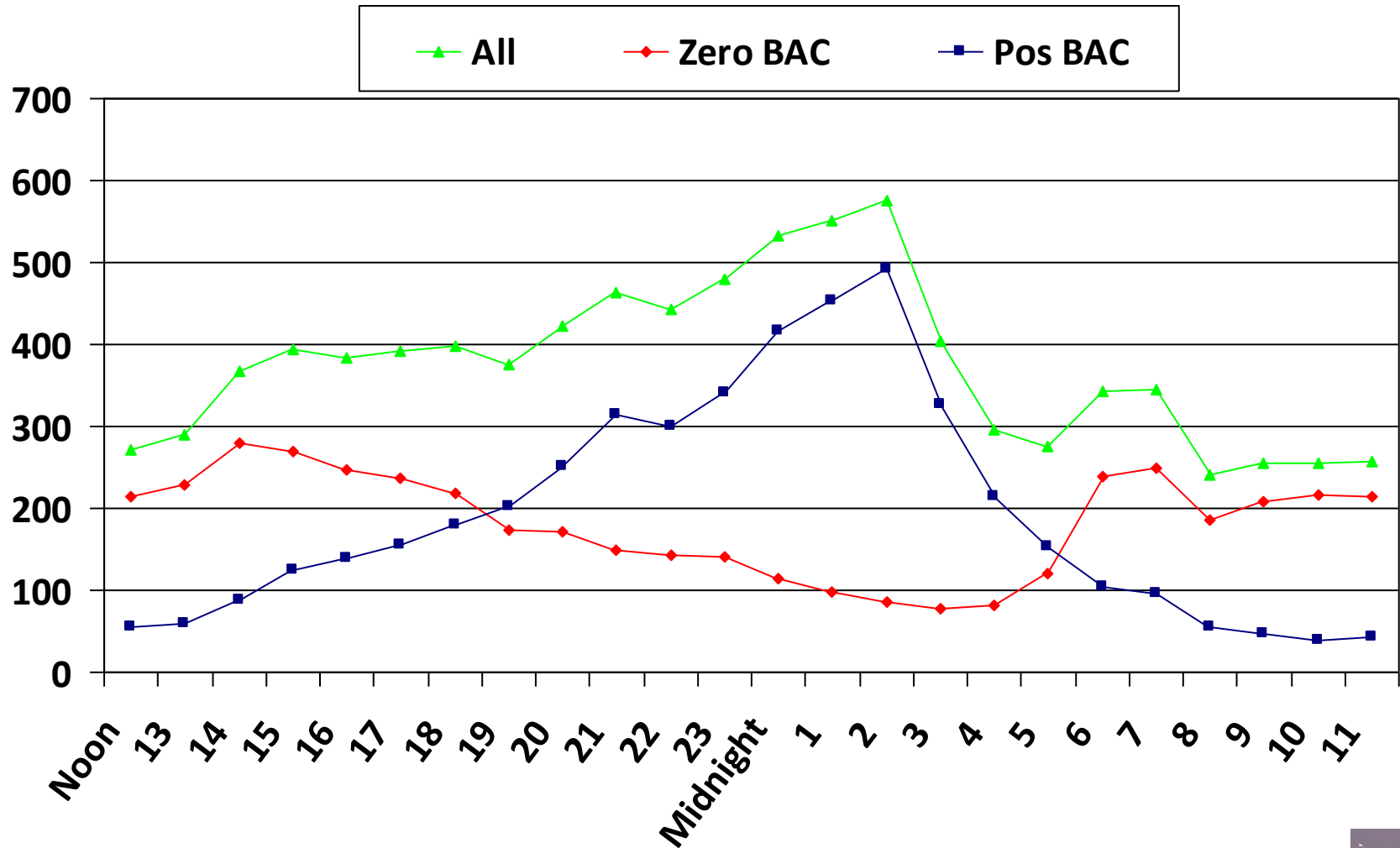
N Unbelted Fatalities by Time of Day



Source: FARS 2008



N Unbelted Fatalities by Time of Day



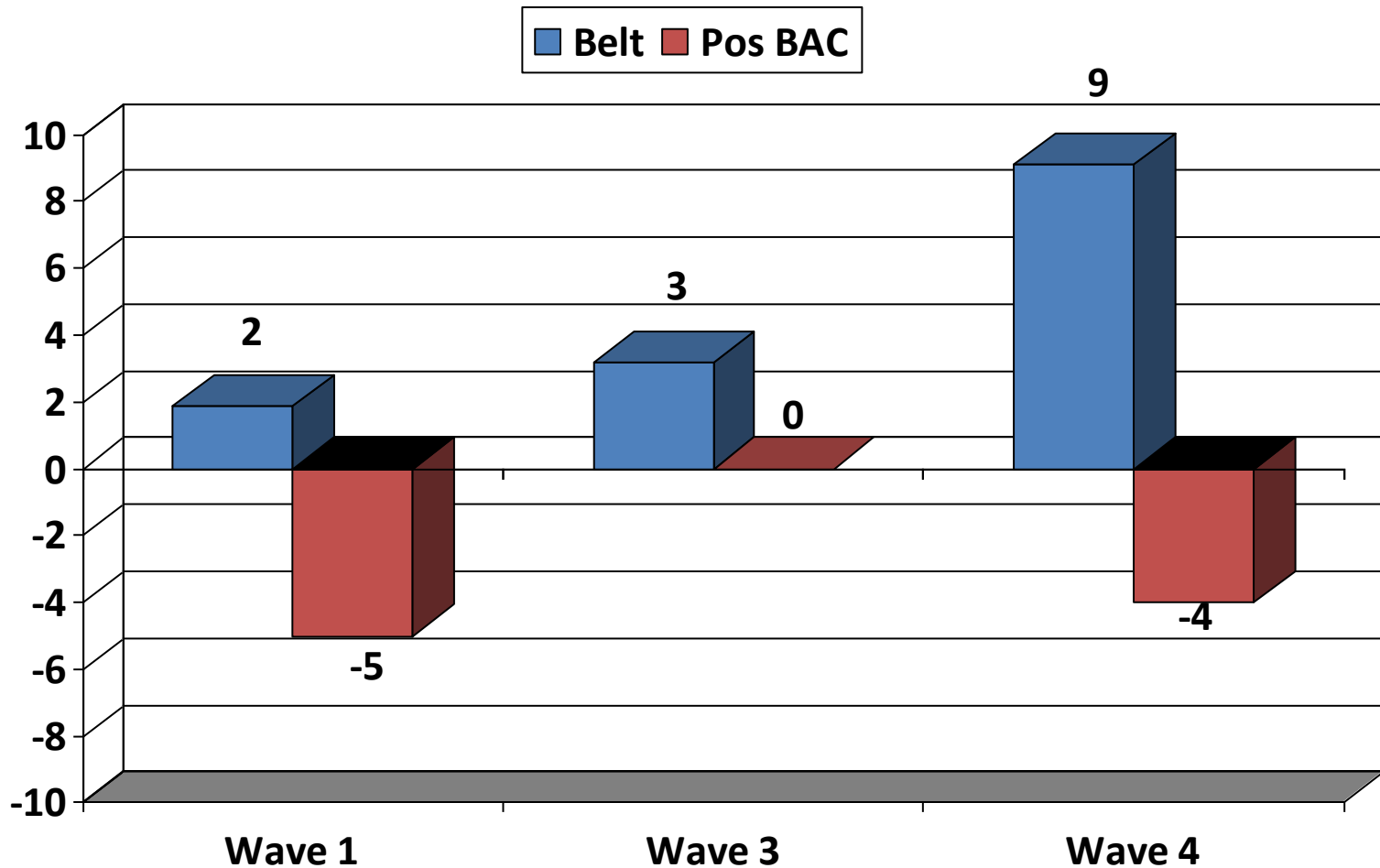
Source: FARS 2008



So...What Can We Do?

- Enforcement programs targeting both belt use and alcohol-impaired driving have shown potential, but are few in number.
 - Binghamton, NY (Wells, Preusser & Williams, 1992)
- Nighttime belt enforcement may help reduce alcohol-impaired driving.
 - Asheville, NC (Solomon, Chaffe & Preusser, 2009)
- Encouraging results, but clearly more research is needed

Pre/Post Changes in Percent Belted & Percent Positive BAC (Asheville, NC)



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