

How hot do cars get?



Have you ever noticed how hot it can get inside a car on a summer day — far hotter than it is outside? That's because a car acts like a greenhouse, trapping the sun's heat.

A study by the Animal Protection Institute showed that even moderately warm temperatures outside can quickly lead to deadly temperatures inside a closed car.

The study, conducted during a local heat wave, compared an outside temperature of a shaded area with the inside of an automobile in three states: fully closed, with four windows cracked, and with two windows cracked. Inside temperatures were measured with an indoor/outdoor thermometer and an oven thermometer (both readings are given). All temperatures use the Fahrenheit scale.

Day 1

| Outside Temperature | | Inside Closed Automobile | |
|---------------------|------|--------------------------|------------------|
| | | Indoor/Outdoor | Oven Thermometer |
| 9:00 am | 82° | 109° | ---- |
| 9:30 am | 87° | 115° | ---- |
| 10:00 am | 91° | 115° | ---- |
| 10:30 am | 94° | 114° | 115° |
| 11:00 am | 98° | 114° | 119° |
| 11:30 am | 100° | 117° | 124° |
| 12:00 pm | 101° | 119° | 127° |
| 1:30 pm | 112° | 124° | 130° |
| 2:30 pm | 125° | 130+° | 159° |
| 4:00 pm | 98° | 110° | 110° |

Day 2

| Outside Temperature | | Inside Auto - 4 Windows Cracked | |
|---------------------|------|---------------------------------|------------------|
| | | Indoor/Outdoor | Oven Thermometer |
| 9:15 am | 84° | 98° | 98° |
| 10:00 am | 88° | 103° | 105° |
| 10:30 am | 90° | 108° | 108° |
| 11:00 am | 92° | 109° | 109° |
| 12:00 pm | 95° | 113° | 113° |
| 1:00 pm | 101° | 114° | 115° |
| 2:00 pm | 110° | 123° | 120° |
| 3:40 pm | 112° | 129° | 128° |
| 4:00 pm | 115° | 132° | 130° |

Day 3

| Outside Temperature | | Inside Auto - 2 Windows Cracked | |
|---------------------|------|---------------------------------|------------------|
| | | Indoor/Outdoor | Oven Thermometer |
| 8:30 am | 72° | 72° | 72° |
| 9:30 am | 80° | 95° | 95° |
| 12:00 pm | 88° | 105° | 105° |
| 1:50 pm | 99° | 109° | 109° |
| 2:30 pm | 104° | 120° | 120° |

(both thermometers showed identical readings)

Other studies show similar results:

- [San Francisco State University](#) - April 2007 fact sheet utilizing data from a Golden Gate Weather Services study
- [Another study](#) reprinted from the Journal of the Louisiana State Medical Society
- [A study](#) from Stanford University shows that even on comparatively cool days, such as 72 degrees, a car's internal temperature will rocket to 116 degrees within 60 minutes. **And keeping the windows open a crack hardly slows the rise at all.**