TECHNOLOGY and PEDIATRIC VEHICULAR HEATSTROKE DEATHS: By the Numbers

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May 2023
CIRCUMSTANCES OF PEDIATRIC VEHICULAR HEATSTROKE DEATHS

<table>
<thead>
<tr>
<th>Circumstances</th>
<th>1998-2022</th>
<th>Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forgotten</td>
<td>496</td>
<td>19.8</td>
</tr>
<tr>
<td>Gained Access</td>
<td>237</td>
<td>9.5</td>
</tr>
<tr>
<td>Knowingly Left</td>
<td>190</td>
<td>7.6</td>
</tr>
<tr>
<td>Unknown</td>
<td>17</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>940</strong></td>
<td><strong>37.6</strong></td>
</tr>
</tbody>
</table>

- Forgotten: 52.61%
- Gained Access: 25.29%
- Knowingly Left: 20.28%
- Unknown: 1.81%
PEDIATRIC VEHICULAR HEATSTROKE
TECHNOLOGICAL MITIGATION SYSTEMS*

**REMINDER SYSTEMS:**
- Door Logic
- Sensor Pads
- Phone Apps

**DETECTION SYSTEMS:**
- Radar
- Infrared
- Ultrasonic

- Exclusive of car seats with sensors, apps and other after market solutions
CIRCUMSTANCES OF PVH MITIGATED BY TECHNOLOGY

- **Forgotten (53%)**
- **Reminder (53%)**
- **Gained Access (25%)**
- **Detection (100%)**

- **Knowingly Left* (20%)**

* Included based on the possibly misplaced assumption that a person knowingly leaving a child in a vehicle does not disable or otherwise ignore said system.
US VEHICLE FACTS

- 193 million light passenger vehicles
  - Includes cars, vans, SUVs and light trucks
- 17 million new vehicles sold per year
  - 8.8% of vehicles on the road
  - Average length of time new car kept: 8 years
  - Percent of new car buyers ≤ 45-years-old: 31%
- 40 million used vehicles sold per year
  - ~ 10% cycled from new cars
  - Percent of used car buyers ≤ 45-years-old: 38%

Sources: Bureau of Transportation Statistics; Hedges & Company; Statista
Potential Lives Saved with Reminder Only Systems

(8.8% New Cars per Year)

Potential Lives Saved: 295

1 Over this 20-year period with no mitigation, there would be on average 755 PVH deaths. % saved = 39%
Potential Lives Saved with Detection Systems

(8.8% New Cars per Year)

Potential Lives Saved: 559

2 Over this 20-year period with no mitigation, there would be on average 755 PVH deaths. % saved = 74%
Potential Lives Saved with Detection Systems

(New Cars Bought by Ages ≤ 45-years-old)

Over this 20-year period with no mitigation, there would be on average 755 PVH deaths. % saved = 29%

Potential Lives Saved: 216

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3 Over this 20-year period with no mitigation, there would be on average 755 PVH deaths. % saved = 29%
Potential Lives Saved with Detection Systems

(New/Used Cars Bought by Ages ≤ 45-years-old)

Potential Lives Saved: 225

Over this 20-year period with no mitigation, there would be on average 755 PVH deaths. % saved = 30%
SUMMARY

- Technology will save lives, but not enough given that less than a third of new cars are sold to persons likely to have children.

- Even after 20 years of detection technology implementation, only about 30% of the potential deaths will be saved.

- Not only is the age demographic of new car buyers a factor in the deployment of these life-saving technologies, but the historically the last people to get new cars/technology are those in traditionally underserved portions of our society.
CONCLUSION

Efforts to curb the deaths of children due to Pediatric Vehicular Heatstroke need to be multi-layered as there is not a single solution to this problem. These need to include continued education and awareness as well as the deployment of effective technologies, both in new vehicles and also via aftermarket solutions.