

# Innovative car seat alerts parents to potential dangers

## The First Years True Fit IAlert works with a smart phone

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An average of 38 children die each year from heat stroke after being left in a hot car. It is a tragic mistake that can happen to anyone, particularly when someone alters his normal schedule. Despite public awareness campaigns, it has been difficult to prevent these horrible accidents, but an innovative new child safety seat may help.

The First Years True Fit IAlert child seat is designed to warn parents of potential dangers, such as the child moving out of the car seat while the vehicle is in motion and if a child remains in the car seat when the vehicle is parked. By measuring ambient temperature, the seat knows if there is a true health threat due to a child being left in a hot car. The system also has a recline angle indicator to help parents achieve the correct angle when using a rear-facing installation.

The system works by synchronizing an IAlert smart phone application with a module in the car seat. Compatible with Android and Apple iOS, the seat can also set emails and text messages to be sent up to 12 emergency contacts in the event that a child is left unattended.

### Life with a smart seat

We recently purchased the True Fit IAlert for our car seat test program. In addition to those extensive tests, I have been using the seat with my 18-month-old son to see how the special features worked during normal driving conditions.

Downloading the IAlert application to my Android smart phone was very straightforward. But after that simple step, the system proved to be quite finicky.

The app was not always able to detect that my son was in the seat. I often had to restart the application for it to work, and sometimes even restarting did not help. This was time consuming and frustrating. If he was detected, the application sounded an alert each time to ask if he was buckled.

One key safety feature is that the system will sound an alert after the vehicle stops moving, if the child is still in the car seat. The alert can be programmed to sound between one and five minutes after stopping. I originally had this option set to one minute, but quickly found that it could sound an alert when I was stopped at red lights. Five minutes proved a better choice.

As I didn't want to leave my son unattended or in a hot vehicle to evaluate that feature, I used two different-sized test dummies: one newborn-sized dummy weighing 7.5 pounds and a larger dummy weighing 52 pounds. With the faux newborn, the system often didn't detect that there was any weight in the seat, even though the dummy exceeds the minimum weight requirement of 5 pounds. And when the application did detect the newborn dummy, it would often lose the connection during the course of the car ride, or incorrectly alert me that the dummy was out of the car seat. (Now that would be scary!)

I found the false alarms while driving to be quite a distraction. I also entered an email address to receive emergency messages, which were not always received. A First Years Customer Service representative informed me that if the alert is dismissed on the phone within 20-30 seconds of appearing, the emergency email and text messages will not be sent, though this is not stated anywhere in the owner's manual.

In terms of detecting the child, First Years clearly says that the alarm is intended to sound when a child moves out of the seat. But product testimonials on its website give the impression that it may also sound if a child unbuckles: “I know that my Olivia has a horrible habit of attempting to unbuckle her car seat and I can’t count how many times I have had to pull over. With the IAlert I will be alerted immediately if she does this.”

That’s a very important distinction regarding the functionality of this technology. The sensor is designed to detect weight in the child seat, not to detect if the child is buckled or not. So a child who unbuckles himself but remains seated can do so without the driver getting any alert. With a colleague in the rear seat to help, the harness and crotch buckle of the dummy were unfastened while the vehicle was in motion, and as expected, an alert was never sounded. It wasn’t until the dummy’s weight was lifted off the seat that we got a notification that the child was on the move.

The module in the car seat has a battery that requires charging before first use. When there is 20 percent or less battery life remaining, the application will sound an alert that the battery requires recharging. During our evaluation, it was difficult to assess the battery life, as the module often stopped detecting the presence of the child during the car ride without warning. A call to The First Years customer service revealed that a fully charged battery should allow about 50 hours of use. But even with the frequent loss of connection, we estimate that the battery in the seat we tested would require charging after about 1 to 2 weeks. If the seat is installed in the rear-facing mode, it is possible, albeit difficult, to access the battery under the fabric seat cover while it’s installed, but the battery is easily accessed if the child seat is installed forward facing.

#### **Bottom line**

Overall, our first impression of the IAlert system is that it is not a technology that should be relied on. For this type of safety technology, establishing and maintaining the connection should be automatic and 100-percent reliable. I often had to restart the application multiple times to establish connection. I found myself so frustrated with trying to get the device to establish connection that I no longer wanted to use the feature. Further, it did not always detect the weight of the smaller dummy (7.5 pounds) and sometimes it would randomly lose connection or falsely notify me that the child was out of his seat.

Our preliminary findings are consistent with a study previously done by the National Highway Traffic Safety Administration and the Children’s Hospital of Philadelphia that found similar technologies unreliable. What’s more, the True Fit IAlert currently retails for a \$299.99, exclusively through Amazon. That’s between \$70 and \$100 more than the standard True Fit C680 without the IAlert technology. A big price difference for a feature we’re not so sure of.

Rather than go the high-tech route, here are a few no-cost ways to remember your precious cargo in the back seat.

- Simple rule: Never leave a child unattended in a vehicle, not even for a minute. In addition to being dangerous, it is against the law in many states.
- Check the car to make sure that all occupants leave the vehicle or are carried out when unloading. If you lock the door with a key, rather than with a remote, it would force that one last look in the car before leaving it.
- Always lock your car and keep keys and remotes away from children.
- To serve as a reminder, keep a stuffed animal on the front passenger seat when carrying a child in the backseat.
- Place something in the backseat that you would need, such as a purse, briefcase or cell phone, when transporting kids.
- Have a plan that your childcare provider will call you if your child does not show up as scheduled.

If you see a child alone in a car, especially if she seems hot, call 911 immediately to help get her out.

–Michelle Tsai

<http://www.consumerreports.org/cro/news/2013/09/the-first-years-true-fit-ialert-car-seat/index.htm>