

ScanEd: Physics of a Crash

*An interactive teen safe driving and passenger safety program presented by
YOVASO and the Virginia State Police*



Overview:

ScanEd is an interactive, hands-on approach to teaching teens and youth the dangers associated with unsafe driver and passenger behaviors and the importance of buckling up and obeying speed limits. It was developed by the Blue Ridge Crash Investigation Team, a program of the Blue Ridge Transportation Safety Board, and uses popular iPad and QR code technology to appeal to high school and middle school students. During the educational program, a wrecked vehicle is set up on site and QR codes are affixed to the vehicle and contents inside the vehicle (such as a cell phone, air bag, seat belt, etc.). The program can be scheduled to supplement school classroom curriculums (such as physics, biology, general science, health, math, driver's education, etc.), or scheduled for an outdoor safety day or event in a school or community. **The program uses science to educate students about the importance of wearing a seat belt and obeying speed limits.**

Scan Ed for School Classes:

Students are divided into two groups and rotate between the following two sessions:

Session A : "Physics of a Crash." In this session, troopers lead a 30 minute classroom presentation and discussion on the physics of a crash and unsafe driver and passenger behaviors. (Minimum: 30 min)

Session B : ScanEd. In this session, a wrecked vehicle is set up on site in the school parking lot or area near the school. Students are divided in teams of two students and each team is given an iPad. The students use the camera feature of the iPad to scan the QR codes on the wrecked car and its contents. As students scan each QR code, they watch videos and other digital media depicting driving risks, unsafe driving behaviors, top causative factors in a young driver crashes, and important information on how to be safer in a vehicle. For example: A QR code on a cell phone would show a video on the dangers of driving distracted, and a QR code on a bent steering wheel would show the injuries to unrestrained occupants during a crash. (Minimum: 30 min)

ScanEd for Safety Days and Community Events:

For outdoor events with a large number of people, only the outdoor ScanEd session with the wrecked vehicle is set up. A quick overview on the physics of a crash is given and participants use the iPads to scan the educational videos on the wrecked vehicle and props.



Benefits:

ScanEd helps teens and youth engage with each other and law enforcement in a dialogue about safe and responsible driver and passenger behavior and enables teens to self-learn using technology they think is cool and fun.

Supports School Curriculums:

ScanEd addresses the physics, biology, and dynamics of a crash and can be used to support science, health, math, physical education, and driver education curriculums.

Program Length for School Classes:

- The two components (Classroom Presentation and Scan Ed) take a minimum of 1 hour per class.
- The program can be lengthened to fit schools on 90 minute block scheduling.
- Schools may schedule multiple classes to complete the program over a one or two-day period.

Sponsorship:

ScanEd was developed by the Blue Ridge Regional Crash Investigation Team, a program of the Blue Ridge Transportation Safety Board. **First Team Auto Mall in Roanoke** donated the initial start-up equipment for the program. **State Farm** funded additional equipment to expand the program and continues to fund program expansion and maintenance of equipment.

Set Up Requirements:

- The outdoor ScanEd portion requires spacing to accommodate a wrecked vehicle, a 10x10 tent, and (2) 6' tables, plus room for participants. Access to electricity is needed for computer equipment.
- The indoor classroom presentation requires A/V equipment (computer, projector, sound, and screen).

Request ScanEd:

To schedule ScanEd for your school or community, visit the YOVASO website at www.yovaso.org/interactive-programs or email kendall.lythgoe@vsp.virginia.gov.

