

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ  
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ  
КАФЕДРА ІНОЗЕМНИХ МОВ  
ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ  
ЦЕНТР**

**МАТЕРІАЛИ  
X ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ  
КОНФЕРЕНЦІЇ СТУДЕНТІВ, АСПІРАНТІВ ТА  
ВИКЛАДАЧІВ  
ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО  
ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ**

**“WITH FOREIGN LANGUAGES TO MUTUAL  
UNDERSTANDING, BETTER TECHNOLOGIES AND  
ECOLOGICALLY SAFER ENVIRONMENT”**

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## AIRBAGS: SAVING LIVES

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The airbag system is one of the crucial parts of any vehicle safety components. Proper airbag deployment can ensure that you and your passengers survive a crash.

The air bag was first conceived by John W. Hetrick in 1952. To design the airbag he applied an event he had observed while in the Navy. He was repairing a torpedo which had a canvas covering. When the compressed air that was in the torpedo was released, it quickly inflated the canvas shooting it to the ceiling. He developed his design until he obtained a patent on the device on 5 August 1952.

Airbags deploy at the front of the dashboard in most cars, and many vehicles have airbags along the side of the car as well. When there is an accident, the airbags fill up with air very quickly to provide a cushioning system for the people in the car so that they are not thrown around in the event of a crash.

To deploy airbags need the crash sensors. There are two types of airbag sensors: electrical and mechanical. Electrical sensors vary in design. Some use an electromechanical "ball and tube" mechanism. Other electrical designs are similar in principle, using accelerometer to trip the sensor. Mechanical sensors work independent of the electrical system with a design that actuates a firing pin triggering a small explosion after a crash.

According to engineering study an airbag can deploy in about 55 milliseconds. This is about the same amount of time it takes you to blink your eyes or sneeze.

Airbags have saved 15 thousands of people for 20 years, or they saved 62 people per month, or it equals 2 saved lives per day. Statistic is taken only from the USA.

Swedish concept of world's first airbag for cyclists was created by Hovding Company. It protects nearly all of the head while leaving the field of vision open.