



Defensive Driving Courses

The DDC Instructor And Administrative Reference Guide

NATIONAL SAFETY COUNCIL MISSION STATEMENT

The nation's leading safety advocate for more than 100 years, the National Safety Council is a nonprofit organization with the mission of eliminating preventable deaths at work, in homes and communities, and on the road through leadership, research, education and advocacy. NSC advances this mission by engaging businesses, government agencies, elected officials and the public to help prevent the third leading cause of death in the U.S. – preventable injuries.

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Section 1

- About the Defensive Driving Courses

Introduction

This manual provides National Safety Council Defensive Driving Course (DDC) Instructors with an overview of the materials covered in the Defensive Driving Courses' E Learning Instructor Development Courses and the Instructor Guidelines from the various Defensive Driving Course Instructor Manuals.

The Defensive Driving Courses have been designed to provide course participants with the skills and knowledge necessary to operate motor vehicles on and off the roadway with due care for the safety and well-being of themselves and the occupants of their vehicle, the operators and occupants of other vehicles, and the safety of pedestrians and the property of others.

The National Safety Council provides Defensive Driving Courses at various levels for training individuals internationally. National Safety Council programs consist of the following elements:

- Courses of differing length and content that use a variety of instructional techniques, audiovisual aids, and student materials
- A network of training centers organized to deliver courses relevant to the industrial, public, insurance, court, and driver licensing department needs of their area
- Instructors, meeting all state and local requirements for certification, authorized by the National Safety Council to deliver Defensive Driving Courses

Defensive Driving Course Training Centers

The organization and operation of Defensive Driving Course (DDC) Training Centers is described in the Defensive Driving Courses Manual of Rules and Procedures, which is issued to every training center.

A DDC Training Center:

- Follows all provisions of the National Safety Council DDC Manual of Rules and Procedures, training center agreement and state mandated course provider requirements, where applicable
- Complies with all federal, state and local laws, rules, regulations and ordinances

- Is prohibited from conducting any driver training program that competes with those developed by the National Safety Council
- Selects, supervises, and trains an adequate number of instructors to meet the local demands
- Is responsible for ensuring that high-quality instruction is provided
- Maintains DDC student and instructor training records and totals
- Procures all DDC training materials from the National Safety Council
- Confirms the availability of equipment and supplies used to instruct the courses
- Maintains training and audiovisual materials in good condition
- Ensures that each student has the proper course guide and other training materials
- Ensures that the course instructor's credentials are current
- Monitors the course to maintain quality
- Has representatives readily available to answer questions
- Ensures that student completion certificates are issued at the end of the course
- Monitors each instructor at least once a year
- Holds annual instructor update seminars
- Verifies the current credentials and status of instructors who wish to be upgraded into other DDC programs for which they qualify, as applicable
- Registers Instructor candidates through the NSC Learning Management System with the National Safety Council and secures the proper training materials well in advance of the program
- Communicates course/administrative changes to its instructor network in a timely manner
- Provides instructors with current student materials
- Cannot reproduce any National Safety Council materials

Defensive Driving Courses

The National Safety Council Defensive Driving Courses:

- Provide the participants with knowledge and techniques to avoid collisions
- Influence and challenge participants to change their behind-the-wheel behaviors and attitudes so that they will choose to drive safely, responsibly, and lawfully

All National Safety Council DDC programs include the most up-to-date instructional materials. The National Safety Council actively solicits the widest possible authorized participation in these programs on the part of all individuals; companies; military; federal, state, and local government centers; associations; and other groups.

DDC Instructor Agreement (IMPORTANT)

All DDC Instructors must be part of an authorized NSC Training Center that has a valid Training Center Agreement on file with NSC. Please make sure your Training Center has a valid agreement prior to starting your Instructor Development Course. NSC will not certify instructors whose Training Center is not currently authorized to train.

Your Training Center must provide you with a current Instructor Resource Kit (IRK) containing an Instructor Manual, multimedia, and Student Course Guide prior to beginning the eLearning Instructor Course.

Upon successful completion of the eLearning Instructor Course, your Training Center will receive your DDC Credential. They will then monitor you while you teach the course until they are satisfied with your competency.

To remain an NSC-certified DDC Instructor, you must agree to fully comply with the following statements:

1. I WILL teach all NSC DDCs as written and for the full duration knowing that failing to do so will violate my Instructor Credentials and could damage the reputation of NSC.
2. I WILL start my class on time, will run it for the full duration and will begin each class with a brief safety reminder (restroom locations, emergency exits, shelter location, etc.).
3. I WILL take all the necessary time to properly prepare for the programs I teach by ensuring I have a thorough understanding of all course materials, as well as my state's Rules of the Road.
4. I WILL register each class participant, track student completions, submit accurate and complete course paperwork to my training center on time, and only give NSC DDC certificates to those who successfully completed the course.
5. I WILL be pleasant, professional, respectful and courteous toward students at all times while providing a safe, comfortable, non-threatening learning environment. I will never touch a student in any way, regardless of how harmless I think it may be. I will never belittle a student. I will never allow a violent or highly disruptive student to remain in the class.
6. I WILL make the participants responsible for their own learning and will refrain from giving students the answers.
7. I WILL always give each student a brand new, unused Student Course Guide.
8. I WILL NOT offer my interpretation of the law.
9. I WILL NOT provide my students with any external content (videos, YouTube, pictures, PowerPoint slides, etc.) knowing that doing so violates my Instructor Credentials.
10. I WILL NOT violate U.S. Copyright laws by copying or recreating any NSC DDC course material. I understand all NSC DDC course materials and content is the registered property of NSC and violators will be prosecuted to the fullest extent of the law.

Defensive Driving Course E-Learning Instructor Courses

The only way a prospective DDC Instructor can become certified to teach an NSC Defensive Driving Course is through the successful completion of an NSC DDC eLearning Instructor Development Course (eIDC).

Upon successful completion of a DDC eIDC, your DDC credential can be viewed at any time by visiting www.nsc.org/lookup.

Instructor Renewal/Recertification

Instructor credentials are issued for a period of 12 months and bear an expiration date. DDC Instructors are required to teach at least two courses per year in order to maintain their “Active DDC Instructor” status. Instructor Credentials must be renewed annually (nominal fee) by their Training Center. If an Instructor credential is not renewed, their DDC credential becomes invalid. Once invalid, under no circumstances can individual teach a DDC.

Renewal invoices are sent to training centers multiple times prior to expiration.

The renewal fee covers instructor authorization to teach the Defensive Driving Course(s) specified on the credential. The instructor renewal fee also covers access to the DDC Information Highway –

The DDC Info Highway houses the following items:

- a. Newsletters
- b. Traffic Safety Magazine
- c. Continuing Education programs
- d. Updated DDC curriculum webinars
- e. Updated statistical information
- f. Information on new programs and updated curricula

Upon payment of the renewal invoice, an Instructor’s credential will be updated and available via www.nsc.org/lookup.

If a training center fails to renew an instructor’s credentials by the expiration date, NSC will invalidate the credential. If the credential remains invalidated for 90 days, NSC will then terminate the credential. Within 12 months of an expired credential, a Training Center may reinstate the credential by paying a late fee, a reinstatement fee, as well as any open renewal/recertification fees. If an Instructor’s Credentials are terminated for more than 12 months, the Instructor will be required to complete an eIDC in order to become recertified to teach a DDC.

Training centers must notify the National Safety Council immediately when canceling or transferring instructor credentials.

New Instructor Monitoring

Supervision of courses helps ensure quality. All courses must be taught as designed within each Defensive Driving Course Instructor Manual. Periodically, the National Safety Council or its representatives may monitor courses. The National Safety Council urges training centers to monitor their instructors.

Monitoring should include:

- Inspection of the actual classroom and facility
- Evaluation of the quality of instruction
- Evaluation of the instructor's adherence to the Instructor Manual (and state requirements, if applicable)

The National Safety Council may from time to time require a Training Center to audit an Instructor due to a complaint to NSC by a student. In the event of this occurrence, NSC may require the training center to send NSC a completed Instructor Audit form (available on the DDC InfoHighway). After reviewing the completed Audit form, NSC may take any corrective action it deems appropriate up to and including credential revocation.

Instructor Status Revocation

The National Safety Council may revoke instructor status for disregarding any National Safety Council DDC or state-mandated policies, procedures, or standards, or for failing to perform stated DDC Instructor responsibilities detailed in the Instructor Agreement found on www.nsc.org/ddc/ia.

DDC Course Fees

Training centers face several considerations when establishing course fees. When fees are charged, they should be low enough to make the course widely available and to meet local competition, but high enough to make the program financially self-sustaining on a continuing basis. Training centers are authorized to establish their own fees or to waive fees altogether. In some cases, the state may have a minimum or a maximum required fee to be charged.

Copyright of National Safety Council Materials

Defensive Driving Course materials are copyrighted by the National Safety Council. You may not copy, reproduce or broadcast any of the National Safety Council Defensive Driving Course materials. Reproducing any NSC DDC course material is a violation of the copyright law and NSC will pursue legal action. If a training center becomes aware of any unauthorized duplication or use of copyrighted material, it must immediately contact the National Safety Council.

Trademarks and Logo Usage

The trademarks, trade names, and logos used by the National Safety Council are the sole property of the National Safety Council. The National Safety Council marks, name and logos shall only be used in the manner stated in "Use of National Safety Council Trademarks," found on the NSC website. Any reference to the Defensive Driving Courses must identify them as the "National Safety Council Defensive Driving Course." Only **active** DDC Training Centers and **active** DDC Instructors may use one of the two below logo designs.



Training Center



Instructor



Section 2

- Teaching Strategies

Teaching Objectives

It is important for you, as an NSC DDC certified Instructor, to know what to present and why you are doing so. You must also be able to address the needs of your classroom Learners. It is difficult to help course participants meet their own needs. The information provided in the Defensive Driving Course programs is more than adequate for the majority of the people in the course. There will also be instances when the number of Learners, time restrictions, and facility limitations will pose challenges to you.

Some people get confused when educational objectives are mentioned. Objectives are the road maps that help learners and instructors know what their destination should be. Simply, learning objectives describe the learning that is expected to occur during the course.

Each of the Defensive Driving Course programs clearly states the course objectives in both the Instructor Manual and the Course Guide.

How much material should be covered in a specific time period and the manner in which it should be presented differ from course to course. Learners bring different personal and professional goals, requirements, attitudes, and needs to each class. Consequently, a particular course outline that works well for one group may not work as well with another group. The instructor must be constantly aware of the pace and then be prepared to speed up or slow down as necessary.

Teaching Methods

If training objectives are the road map, then teaching methods are the vehicle used to reach the destination. In some of the courses the number of participants and their backgrounds will also affect the teaching method used.

Various teaching methods are used in the Defensive Driving Courses:

- **Lecture**

Lectures are necessary in certain situations, such as when initially discussing a new skill or topic. Lecturing is a traditional teaching method, but it limits participation with the class members.

- **Discussion**

Material can be presented by involving participants in discussions. This allows for good group interaction and allows participants to learn from each other.

- **Group Activities**

Participants can work in small groups to solve problems or determine how a scenario would be handled. This method also creates good interaction.

- **Case Studies**

In case studies, participants are presented with a situation that they must resolve. Participants are then asked to analyze the situation. In their analysis, they identify what went well and what could have been done differently. They also identify and discuss the principles being presented.

- **Role Playing**

In role playing, participants assume various roles in different situations and attempt to deal with the problem facing them. This method provides for greater interaction; however, it is not effective with shy or unwilling participants.

Keep the course interesting, and keep it moving. Participants remember information that is presented in an interesting, challenging, and even entertaining way. Making use of audiovisual aids will help keep the course interesting.

Make the participants responsible for their own learning. Give them enough information, but don't tell them where to dot the i's and cross the t's.



Section 3

• Defensive Driving Course Components

All National Safety Council Defensive Driving Course programs include a variety of educational components for flexibility in course delivery and teaching styles. Course components include written materials such as participant course guides and Instructor Manuals, self-assessment profiles as well as audiovisual aids called our DDC multimedia.

Participant Course Guide

Each Defensive Driving Course has a course guide to be used by each student. Each student must receive a new DDC Course Guide prior to starting the course. The course guide provides the latest information and skills for that particular course:

- Interactive exercises, fully integrated with discussion and audiovisual presentations
- Valuable information to help participants drive more safely
- Photographs and illustrations that provide current concepts and procedures
- Take-home activities and exercises that help participants enhance the level of their understanding of the topic
- **It is expressly forbidden for students to “share” course guides or for training centers to “reuse” course guides.** The fee collected is to provide for each student to have her/his own course guide and take it home.

Instructor Manual

All Defensive Driving Courses have an Instructor Manual. The Instructor Manual contains the lesson plans and information necessary to teach the course. The instructor must have the Instructor Manual open in the room and follow the instructions in it.

DDC Instructor Resource Kits (Instructor Manual + Multimedia)

All NSC DDC Courses offer an Instructor Resource Kit which is required for each Instructor to have in order to teach the course. The “IRK” contains both the Instructor Manual as well as the multimedia which is used to present the course. Note: the IRK also contains a sample Course Guide and Sample Completion Certificate.

DDC multimedia is used to present key information and demonstrate the fundamental skills taught in the courses. Multimedia is offered in presentation-style formats including a combination of slides, text, audio, still images, animation, video, and other interactive content forms. Our multimedia is designed to help create consistency in course delivery and skills demonstration. Under no circumstances are instructors allowed to present images, photos, movies, etc. beyond what’s provided within the DDC IRK.

All DDC training material is purchased from National Safety Council by the training center. These materials may only be used when instructing the course for which they were created and the material contained in them are the intellectual properties of the NSC. When National Safety Council issues new training material, training centers must migrate to the new materials as quickly as possible.



Section 4

- Conducting Defensive Driving Courses

Certified Defensive Driving Courses

The following National Safety Council Instructor-Certified Defensive Driving Courses are available:

- Defensive Driving Course 10TH edition (4-hour, 6-hour, 8-hour) *
- Attitudinal Dynamics of Driving*
- Alive at 25*
- Professional Truck Driver
- Chronic Offender
- State Courts Against Road Rage (SCARR)

Course Participants

Defensive Driving Courses are designed for four broad categories of audiences:

- Community, including business and industry, as well as family
- Court or state-ordered traffic offenders wishing to dismiss a traffic ticket or reduce the points on their driver's licenses
- People pursuing an insurance discount
- Individuals ordered by state licensing authorities to successfully complete a course prior to reinstatement of driving privilege

Course Length

Each Defensive Driving Course has a required course length set to cover the objectives of the course. Many governing bodies use these times and contents to determine the training time required for those in attendance.

You should be very familiar with the time required for the course(s) you are teaching and other requirements if teaching a state program, if applicable.

In some state programs, though breaks are given, break time does not count toward the total hours of training.

When determining a class schedule, instructors should refer to the course agendas included in their instructor manuals to verify if the DDC class times include breaks and adjust the schedule accordingly. Note that course agendas do not allocate time for lunch breaks. If you plan to teach through a meal time, you should consider extra time in your schedule for adequate breaks.

Recommended Class Size

In order to ensure proper training an appropriate class size is important.

Recommended class sizes are as follows. Please note that some state programs may require a smaller class size; check individual state requirements where applicable.

- **Defensive Driving Course 10TH edition:** optimal 15... maximum 35
- **Attitudinal Dynamics of Driving** – optimal 15... maximum 25
- **Alive at 25:** optimal 15... maximum 25
- **Professional Truck Driver:** optimal 15... maximum 30
- **Chronic Offender:** optimal 15... maximum 20
- **State Courts Against Road Rage:** optimal 15... maximum 20

NSC cannot support exceeding the above maximums nor hosting a class with less than 10 learners in the course due to the required interactivity that NSC builds into our programs.

Classroom Environment

You should ensure that the classroom environment is adequate for proper course delivery. An inadequate classroom environment may affect the ability of the participants to get the most out of the Defensive Driving Course. When selecting a course site, consider the following issues:

- **Safety** – The Training Center and Instructor must provide the most safe and secure facility feasible to ensure the best possible learning environment.
- **Electricity** – The Defensive Driving Courses require audiovisual equipment. There should be proper access to electrical outlets with minimal safety concerns.

- **Restrooms** – Restrooms must be available for participants to use. Avoid situations where participants have to travel far to reach restrooms.
- **Lighting** – Proper lighting is important to ensure a proper learning environment. A dimmer switch to control lighting is advantageous when showing audiovisual materials.
- **Climate control** – The room should be heated in the winter and cooled during the summer.
- **Seating** – Chairs and tables are best for most adult learners. Due to adults' physical differences (e.g., body size, height, back problems, leg length), avoid using student school desks.
- **Accessibility** – The room should provide easy access to carry equipment in and out as needed. Depending on the location and audience, the facility should also have access for disabled participants.
- **Security** – The classroom and parking lot should be secure. If these areas are not secure or do not have adequate lighting, then security personnel should be on hand for the course and until the instructor has left.

NOTE: It is the instructor's responsibility to report to his/her training center any violations of the above environmental concerns in written format. When monitored, these elements will be evaluated as the instructor's responsibility.

Course Material and Equipment

To properly conduct the Defensive Driving Course, you will need the appropriate course materials and equipment. Program-specific materials and equipment are listed in the Instructor Manual. A general list of required items is provided on the next page.

Classroom Requirements

- Proper tables and seating arrangements
- DVD and TV OR computer, projector and screen
- Dry-erase board or easel with blank paper tear chart
- Markers (dry-erase or no-bleed for paper)

Participant Requirements

- Pencil/pen
- Handouts
- Brand new Course Guide
- Duplicated second chance final exams

Instructor Requirements

- Current DDC Instructor credential (you must know your Instructor ID#)
- Specific Instructor Resource Kit (Instructor Manual + Multimedia)
- Specific Course Guide
- Participant roster
- Exam answer sheet
- Course completion certificates, if applicable

Customizing Courses

If any of the National Safety Council Defensive Driving Courses do not fit a specific audience's needs, contact the National Safety Council to see if a program can be designed or modified.

This also applies to language translations. Please direct inquiries to:

National Safety Council
Defensive Driving Course - Subject Matter Expert
1121 Spring Lake Drive
Itasca, IL 60143-3201

Helping Participants Overcome Disabilities

The Americans with Disabilities Act bars discrimination against the handicapped in places of public accommodation. Individuals with physical or mental disabilities cannot be denied full and equal enjoyment of the goods, services, facilities, advantages, or accommodations offered to the public.

As an instructor, you may present a course to participants who need accommodation, including those who are hearing-impaired, partially paralyzed or lacking full use of limbs, or with other physical limitations. If the individual can successfully meet the course objectives, he or she will receive a course completion certificate.



Section 5

• Course Completion

Successful Course Completion

Course participants desire a certificate of completion as part of a job requirement, to satisfy a court ruling, to give to their insurer for a premium discount, or to have the state reduce the number of charges on their driving record.

In order to earn a certificate of completion, participants are required to:

- Be on time to the course
- Return from breaks on time
- Participate in the program
- Complete any forms, tests, and/or evaluations required by a governing body

If a governing body requires a written examination, the minimum passing score is determined by the training agency offering the class. Any participants who have difficulty reading can complete an oral exam by having the instructor read the examination to them.

If a participant fails the written exam, he or she should be given the opportunity to review the exam. The instructor may then clarify any areas of confusion the participant may have. Unless the governing body stipulates otherwise, the participant should be given a second chance to pass the written exam. (A master copy for the reproduction of a B version of the final exam and a master copy of the answers are included in each Instructor Manual.) If he or she is not able to complete the written exam on a second attempt, the participant must retake the course.

Issuing Course Completion Certificates

Participants who successfully complete a DDC program taught by a certified DDC Instructor are eligible to receive a National Safety Council Defensive Driving Course Certificate of Completion issued by National Safety Council or the local training center, depending on state program requirements. The certificate is a two-part document. The main record indicates the course title, date of completion, and participant's driver's license number and mailing address. An employer or other party who is required to maintain course completion records can keep this section on file. The other section is a detachable wallet card for the participant to keep.

State/Local Government and Court Completions

If your training center has arrangements to do training for governing bodies or courts, there should be a written document that dictates exactly how any other paperwork is to be completed.

If the participant must return a document to the governing body or court, your training center should supply her/him with a written form with the following information:

- The exact location where the participant must appear
- Exactly what documentation is to be presented
- Phone number of the governing body or court in case there are other questions

Replacement of Certificates

NSC will not replace completion certificates misplaced/lost by training centers or their instructors. NSC will replace misprinted/damaged certificates at a nominal fee (currently \$1.00ea) upon NSC first receiving the misprinted certificates.

For individuals that lose or damage their completion certificates, the training center should replace at a fee that's at least the charge of a new Course Guide (which is how much the Training Center will pay for a replacement). NSC would encourage at least a \$10 replacement fee to the Student who lost their certificate but the price is solely at the discretion of the Training Center. Please consult your course rosters to verify participant attendance before issuing a duplicate certificate.



Section 6

- After the Course

Course Wrap-Up

All NSC Defensive Driving Courses include a course evaluation tear-out card built into the back page of the student Course Guide. **Towards the end of the course, the Instructor must ask the student to take the Course Evaluation tear-out card home and complete the evaluation.** NSC offers an incentive for the student to complete the evaluation.

The training center may wish to design an additional evaluation form of its own that would be kept by the training center.

After the course is completed, Instructors must complete any paperwork required by the training center. Instructors must complete the course roster and submit it along with any collected fees to the training center. Training centers may require additional paperwork, so instructors should be familiar with the requirements of their training center.

Training centers should keep copies of the course records in case any questions arise.



Section 7

- Where Did It All Come From?

To learn more about the history of driving, please visit the **DDC Information Highway** by visiting www.nsc.org/ddc/infohighway. The nation's first Defensive Driving Course was developed by NSC in 1964. The course was designed around two definitions:

- Defensive driving
- Preventable collision

These definitions were later adapted for use in the National Safety Council- Safe Driver Award program.

Defensive Driving Definition

Defensive Driving is; "Driving to save lives, time and money in spite of the conditions around you and the actions of others."

Saving lives is the most important goal of these courses. **Time** is second in importance. Collisions result in lost time, and time is money. The third element, **money**, is important to our livelihood.

This second part of the definition, in spite of the conditions around you and the actions of others, sets the condition for defensive driving. The weather, road, traffic, light vehicle and/or unsafe actions of other drivers are not "excuses" for collisions.

Preventable Collisions

Collisions are reported and judged as preventable or non-preventable either by a company professional, company committee, law enforcement officer, insurer, risk manager or state license issuer. For purposes of the general driving public in DDC classes, this is a measure and standard of driver responsibility. The NSC's Safe Driver program defines a preventable collision as:

"... a collision in which the driver failed to do everything reasonable to avoid it."

Why is the word “reasonable” used instead of “possible?” The answer is because the possibilities are endless. Reasonable, realistic action is measurable and can be learned. In the Defensive Driving Courses, the participants are taught responsible and reasonable actions to take to avoid collisions and violations.

Crash or Collision, NOT Accident

NSC has used the words crash, collision or incident in defensive driving since the early 1980s. The Defensive Driving Courses are based on the definition of “preventable collisions,” not preventable accidents*.

When two vehicles strike each other, a collision has occurred.

When a vehicle strikes a parked vehicle or any other object, this is a crash.

A driving situation outside of a collision or crash is an incident. (Example: If a transit bus driver over-applies the brakes and a passenger falls from his/her seat, this is an incident.) An incident is defined as any experience, condition or occurrence and therefor may include crashes and collisions. Incidents are more general whereas crashes and collisions are more specific in their definition.

A traffic collision is not an “accident.” It is a result of a driver or drivers not doing everything reasonable to avoid the collision. For example: Slowing down, using low-beam headlights and increasing following distance on a rainy day are reasonable actions drivers can take to reduce the risk of a collision.

*An “accident” implies an act beyond the control of the driver involved. In the previous example of driving on a rainy day, if we accept the idea of an accident, then the driver would have had no option other than being a victim of the elements of nature.

The term “accident” can be used as a psychological term to excuse oneself from making proper choices in the operation of a motor vehicle

DDC Collision Prevention Formula

This formula originated from H.W. Heinrich’s “Standard Accident Prevention Formula”, a three- step incident prevention technique used in business and industry. The following three-point formula contains the steps of Heinrich’s original formula, but was changed to reflect the premise in defensive driving that collisions are not accidents.

- Recognize the hazard.
- Understand the defense.
- Act correctly, in time.

Following Distance

Safe following distance is a critical factor in collision avoidance. NSC recommends at least a three-second following distance under ideal driving conditions for passenger vehicle drivers.

For drivers of large commercial vehicles, the recommended best practice is a minimum seven to twelve second following distance under ideal conditions. However, for all vehicles, additional following distance must be added when driving conditions are poor.

Three-second following distance

In the late 1960s, the National Safety Council suggested a two-second following distance rule under normal driving situations. (An additional second was added for each driving condition that deteriorated. Those conditions included light, weather, road, traffic, vehicle, and other drivers.

This became known as the Two-Second Plus Rule.)

In the early 1990s the National Safety Council as well as other driver educators and state DMVs grew concerned about this distance. The original Two-Second Rule was based on the belief that when the driver of the first vehicle applied the brakes, the vehicle would stop without striking another vehicle or any other object on the roadway. This would allow the second vehicle the same stopping distance, thus avoiding a collision. It was also assumed that vehicles of large size could stop in the same distance. That too proved to be untrue.

Today, far more distractions exist in the vehicle and on the roadway than ever before. A driver's attention is no longer focused only on driving. In-vehicle technology (e.g., on-board navigation systems, cell phones, DVDs, and compact disc players) and doing other tasks while driving (e.g., eating, grooming, reading, talking) are taking attention away from the driving task. These distractions heavily impact the time it takes to perceive a hazard.

Stopping distance

Stopping distance is made of three components: 1) perception distance, 2) reaction distance, and 3) actual braking distance. The time factors are perception time, reaction time, and braking time. Based on the following factors, these times then convert into distances:

- Physical and emotional state of the driver
- Mechanical capabilities of the vehicle
- Weather, road and traffic conditions
- Laws of physics

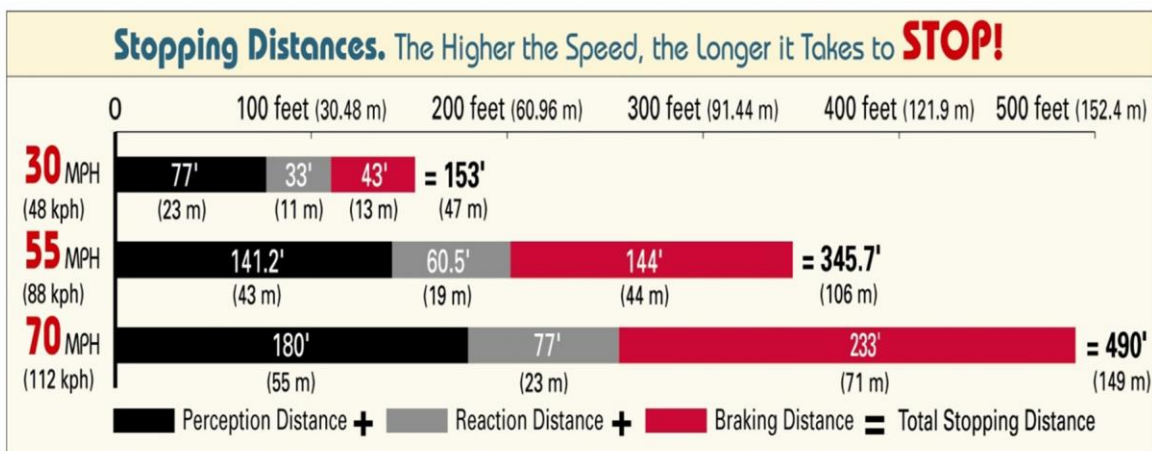
Since 1998, the American Association of State Highway and Transportation Officials (AASHTO) and the U.S. Department of Transportation's Manual on Traffic Control Devices (MUTCD) had used 2.5 seconds for combined perception and reaction times. This is the time that people who design our highways and place traffic control devices allow when building and repairing our nation's roadways.

The 2.5 seconds is divided into perception time and reaction time. Perception time is 1.75 seconds; reaction time is .75 second. The 2.5 seconds does not allow any space if the lead vehicle strikes another vehicle or object, and stops in less than the space allowed by the braking distances chart.

With the problems caused by the "distracted motorist," the NSC chose to add more time for proper perception and a small space for safer braking. The three-second and three-second plus following distance rules allow the driver who can perceive in 1.75 seconds and react in 0.75 second a cushion of 0.5 second for the striking hazard in a shorter than normal stop by the vehicle ahead.

The chart below depicts stopping-distance calculations based on ideal conditions: a competent driver driving a standard size passenger car equipped with good tires (proper tread and recommended inflation) and disc brakes, on dry concrete, and in good weather. The chart converts stopping distance equivalents to metric for instructors located in areas where that is the unit of measurement.

Stopping Distance Examples



The Three-Second Plus Rule

To avoid collisions resulting from following too closely, drivers should keep at least three seconds of following distance in good conditions. What should drivers do when their emotional or physical condition is not at peak performance level? Use the three-second plus following distance rule. That means for every poor condition, add one more second of following distance to the baseline of three seconds. For example, if the driver is feeling ill, tired or stressed you would add at least one more second to equal four seconds of total following distance. If the driver is stressed and tired then add at least two more seconds, one second per condition, for a total of five seconds following distance.

Driver background and experience also play a large role in following distance.

- New drivers have very little experience with the entire highway system. As a result they may not know what hazards to watch for or be able to determine a proper stopping distance. This applies to new drivers regardless of age.

It is also known that teen drivers have a tendency to believe they can handle the vehicle better than they actually are able to.

For these reasons the minimum following distance for a new driver should be no less than four seconds.

Mature drivers may have conditions which delay their ability to perceive or act as quickly as a middle-aged or even younger driver. For these reasons they may need four or five or even six seconds of following distance.

Vehicle size and operating capacity also may cause a driver to have problems.

If the driver normally operates a small car and then is suddenly operating a SUV, large van, or rental truck, he will experience difficulties with the engine's size, the response of the engine and brakes in relationship to the weight of the vehicle and position of the load.

- Weather experience is also a concern for those drivers who live and drive in one environment for years and then are placed in an environment where weather and light conditions are significantly different.
- Road environment and construction play a part as well. If the driver is very familiar with rural or suburban/small town driving, she may experience problems in congested city driving or operating in heavy rush hour traffic on a major multiple-lane expressway.

The reverse is true of urbanites who find they are driving in a rural area with unsigned crossroads, vehicles or animal husbandry, deer, farm animals, gravel roads, low shoulders or open drainage systems.

Stopping distances educational tool

The below chart is for educational purposes only. It was designed by the DDC International Advisory Committee of the National Safety Council's Driver Safety Training department as a tool for use in training Defensive Driving Instructors.

The calculations are based on the following ideal driving conditions:

- A competent driver
- A standard size passenger car equipped with good tires (proper tread and recommended inflation) and disc brakes
- Dry concrete
- Good weather conditions

These values are useful for purposes of design, warning and regulation, and as a guide to "just good driving practices." However, actual times and distances will vary depending on various driver, vehicle, roadway, and weather factors.

Stopping Distances

Speed		Perception Distance* (ft)	Reaction Distance* (ft)	Braking Distance** (ft)	Total Stopping Distance (ft)	Rounded Distance (ft)
mph	ft/sec					
10	14.7	25.7	11.0	4.8	41.5	42
15	22.0	38.5	16.5	10.7	65.7	66
20	29.3	51.3	22.0	19.0	92.3	92
25	36.7	64.2	27.5	29.8	121.5	122
30	44.0	77.0	33.0	42.9	152.9	153
35	51.3	89.8	38.5	58.3	186.6	187
40	58.7	102.7	44.0	76.2	222.9	223
45	66.0	115.5	49.5	96.4	261.4	261
50	73.3	128.3	55.0	119.0	302.3	302
55	80.7	141.2	60.5	144.0	345.7	346
60	88.0	154.0	66.0	171.4	391.4	391
65	95.3	166.8	71.5	201.2	439.5	440
70	102.7	179.7	77.0	233.3	490.0	490
75	110.0	192.5	82.5	267.9	542.9	543

Sources: AASHTO, ITE, USDOT, MUTCD

* These calculations are made using a 1.75 seconds perception time and 0.75 second reaction time. These times equal 2.5 seconds per AASHTO and the U.S. DOT's Manual on Uniform Traffic Control Devices.

**These calculations use a friction factor of 0.70. This is a median value for braking to a complete stop on dry pavement.

Seven to Twelve second following distance for large commercial vehicles

For large commercial vehicles, safe following distance becomes an even greater safety factor in collision avoidance. Rear-end collisions account for 8-10% of all truck crashes, but the cost is about 30% of all collision costs because these crashes usually result in bodily injury.

The four-second standard following distance originally recommended in the CDL training programs has been found to be too close for safety. The National Safety Council recommends a best practice approach of keeping a seven – twelve second minimum following distance instead of the standard four seconds.

Following distance should never be less than seven seconds when driving in ideal conditions. As the truck's speed increases and/or as driving conditions change, add one or more seconds following distance as shown below:

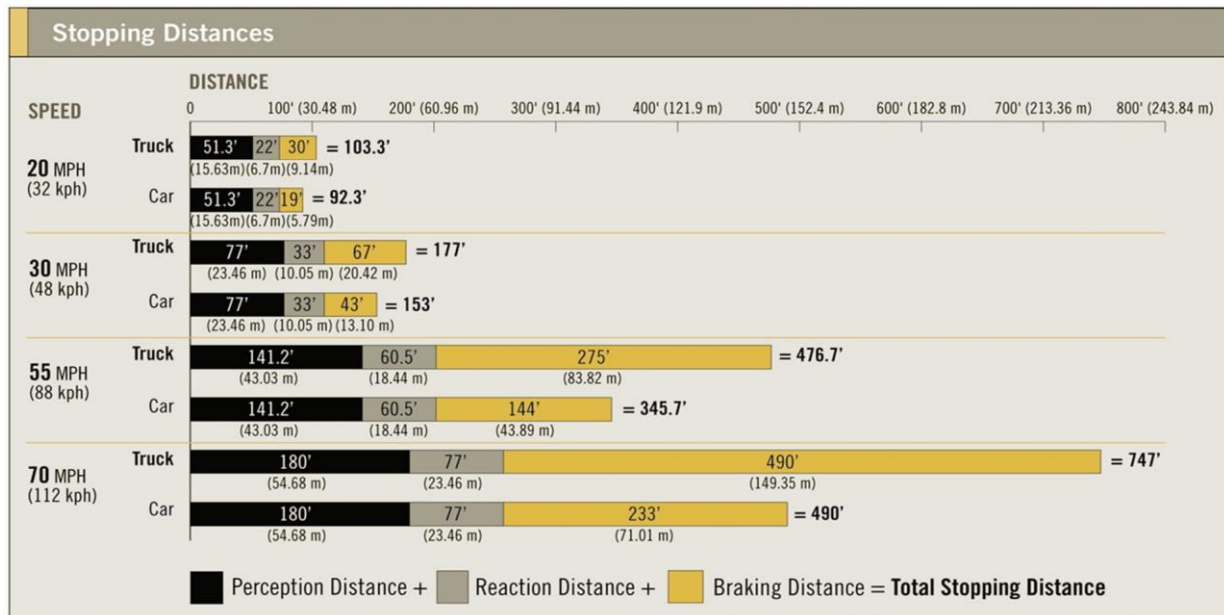
- For speeds below 40 mph, use one second for each 10 feet (3.05 m) of vehicle length (never less than seven seconds).
- For speeds above 40 mph, use one second for each 10 feet (3.05 m) of vehicle length and ADD one more second (never less than eight seconds).
- For special loads, ADD the overhang to the vehicle length.
- In poor driving conditions, ADD one second for each condition.
- ADD one second for every two hours of driving time.
- When being tailgated, add the tailgater's following distance to the truck's following distance.

Braking and stopping distances for large commercial vehicles

Unlike four-wheel vehicles, be aware that air-brake lag distance must be added to a large truck's total braking distance.

Air-brake lag distance is estimated to take about 0.5 second additional braking time. This distance increases with the truck's speed. To make it easier to see this increased braking distance, and to compare it to four-wheel vehicles, air-brake lag distance is included in the Braking Distance column of the chart on the next page.

Stopping Distances for Large Trucks



As the above chart shows, both perception distance and reaction distance are the same for both four-wheel vehicles and commercial vehicles. It also shows as speed for both types of vehicles increases, perception and reaction times increase.

The main difference between four-wheel vehicle and commercial vehicle stopping distances is braking distance. Large commercial vehicles have much greater braking distances. In addition, the higher the truck's speed, the greater the braking distance.

On dry pavement, under normal driving conditions, braking distance alone for large trucks traveling at:

- 20 mph is about 30 feet (9.14 meter)
- 30 mph is about 67 feet (20.42 meters)
- 55 mph is about 275 feet (83.82 meters)
- 70 mph is about 490 feet (149.35 meters)

Safe vs. Legal

The National Safety Council's Defensive Driving Courses emphasize that drivers should always obey traffic laws and make the safest choices to avoid collisions.

However, it is important to emphasize that sometimes what is legal is not the safest option. For example, driving in a limited visibility condition on a highway at 60 mph while most of the traffic is travelling at 45 mph is "legal," but is it safe?

If your state allows drivers to pass on a two-lane bridge, which is not marked with a double yellow line, it is legal to pass but is it safe?

There are many examples of safe versus legal driving conditions. The emphasis to the participants should be that good judgment is paramount to defensive driving.

Scanning Patterns

The “left, right, ahead, left” scanning pattern that has been taught in DDC and in driver education allows the driver to recognize many intersection hazards. Here are two suggestions to expand on this hazard identification practice:

1. Use the scanning pattern at intersections with one-way streets since a driver could be driving the wrong way down the street.
2. Scan ahead to check that there is enough room to enter the next block if moving forward, and to identify whether a driver in the oncoming lane is going to turn in front of you.

Relationship of Tire Size to ABS, Cruise Control and Speed

Based on the market the automobile manufacturer is trying to reach:

1. The design engineer selects an engine.
2. Based on the engine, a transmission is selected.
3. Based on the selection of the transmission:
 - A choice of two types of tires is made.
 - One type is high performance.
 - One type is lower cost.
 - A braking system is chosen.
 - A micro process for the ABS is calibrated.
 - The cruise control is set.

The use of a tire not specified in the design is the first place where the vehicle seller, re-seller or purchaser can cause a system failure.

If the tire does not fall into “spec,” the braking system may be too abrupt or not powerful enough for the proper traction in operation. Along with this the speedometer will be incorrect, which then throws the cruise control off.

Tread Depth and Vehicle Handling

When you watch drivers on an approved race track, you will notice that the tires are very different from “highway” tires. They are called racing “slicks.” These tires allow the most surface contact with the track. This works because the surface on the track has no potholes, bumps, trash or liquid on it. Also note that if it begins to rain on a race day, the drivers immediately head back into the pit for different tires. This is a luxury we do not have when driving our vehicles on today’s roads.

The groove or tread on a tire allows moisture which builds in front of the tire, which is now functioning as a squeegee, to dissipate through the tread and avoids some of the hydroplaning.

In many places you will read that a tread depth of 3/32 of an inch (1.6 mm) allows you to drive safely. This is so **incorrect** it can kill you. If you have less than 2/32 inch of tread depth you must replace the tire.

Tread depth is measured by a tread depth gauge, which can be purchased in almost all auto accessory stores. Over the years many people have used the “Lincoln head penny test.”

Let me first say that with the tread depth gauge or the penny you must test in no fewer than four places on the tire – six is even better. (Basically you test the tread depth, as if you were looking at the face of a clock, at 12 o’clock, 3 o’clock, 6 o’clock and 9 o’clock.) Yes, that involves small marks on the tire and moving the vehicle to hit the proper positioning. (It also involves measuring the depth of each tread opening across the tire at each location!)

With the Lincoln head penny – place Abe head down into the tread. To pass this test, the top of Abe’s head must disappear into the tread in every location. If the tire passes this test, you have the legal minimum tread to operate that tire on a dry roadway.

If you are driving in wet weather/on rainy days, then you need 4/32 of an inch (3.22 mm) of tread depth to allow the water to dissipate from in front of the “squeegeeing” tire. Again this can be tested with the tire tread depth gauge or by using a Washington head quarter. The test works the same, with George standing on his head and being inserted in the same number of places on the tire and across all tread gaps. If the tires pass the test, you are able to drive at a speed lower than the posted speed limit on rainy days. But you do not qualify to drive in the snow.

If you are driving on a snowy day and have tires designed to drive in the snow, then you need $\frac{6}{32}$ of an inch (4.88 mm) of tread depth to allow the tread to bite into the snow.

Do the rear tires of the vehicle in front of you have a “white tread?” Then that vehicle is sledding along with little to no traction.

To find $\frac{6}{32}$ you can use a tread depth gauge or the back side of a penny. (You need a penny with the Lincoln Memorial for the test to work)!



Section 8

- Drug and Impaired Driving

Drivers impaired by alcohol, prescriptive drugs, over the counter drugs, medicinal/recreational marijuana and other illegal substances account for a very large number of motor vehicle crashes and occupant injuries and deaths every year. A sharp increase in the BAC content mixed with other drugs is at an all-time high. Mixing of drugs or drugs and alcohol is called synergism. For example, mixing marijuana and alcohol causes dramatic increases a driver's impairment. For the most current statistics please see NSC Injury Facts online at injuryfacts.nsc.org

For DDC-PTD Instructors

Those holding a CDL license and those in "safety-sensitive" jobs within the transportation industry face lower blood alcohol concentration (BAC) thresholds and stricter penalties for driving/operating under the influence of alcohol or other drugs. The prima facie level for these driver/employees is 0.04 and applies whether they drive a personal or work vehicle. Penalties for DUI conviction are defined by state statute and may include loss of CDL (suspension) for 1 year for a first offense, and loss of the CDL for life (revocation) for a subsequent offense. In some states you lose all driving privileges, while in others, you may lose your CDL but you may maintain a class C driver's license (likely with some restriction). Know your state laws related to penalties and licensing.

The Federal Highway Administration (FHWA) publication, Alcohol and Drug Rules: An Overview, spells out the conditions under which employees in safety-sensitive jobs may be tested for alcohol. The entire overview document can be downloaded from the FHWA website (fhwa.dot.gov).

The testing conditions are:

- Randomly, just before, during or after performance of a safety-sensitive function
- Due to reasonable suspicion, when a person trained to recognize drug and alcohol effects observes behavior or appearance that is characteristic of alcohol misuse
- Post-crash: conducted after traffic crashes on drivers whose performance could have contributed to the collision and for all fatal crashes even if the driver is not cited for a moving traffic violation
- Upon return-to-duty and follow-up: conducted when an individual who has violated the prohibited alcohol conduct standards returns to performing safety-sensitive duties

The FHWA's rules also prohibit covered employees from performing safety-sensitive functions within four hours after using alcohol and during the eight hours after a traffic crash if their involvement has not been discounted as a contributing factor. Commercial motor vehicle drivers having a blood-alcohol concentration between 0.02 and 0.039 must be removed from driving for at least 24 clock hours. (This does not mean the start of the next work day. It is 24 hours from the confirming alcohol test.)

DUI/DWI Laws

Since 2009 all 50 states and the District of Columbia had "per se intoxicated" driver laws which set 0.08 as the illegal BAC level. The laws define it as a crime to drive with a BAC at or above the proscribed level.

In 2018 the state of Utah moved the per se limit to 0.05 and other states are considering similar legislation.

Zero-tolerance laws

All 50 states and the District of Columbia have enacted zero-tolerance laws for established blood alcohol thresholds per se for drivers younger than 21 years of age. Federal legislation passed in 1995 that allows for withholding of highway funds played a role in motivating states to pass such laws. The zero-tolerance laws mandate a lower BAC level for minors. However, each state defines zero tolerance at different BAC levels ranging from .00 BAC to .02 BAC.



Section 9

- Special Vehicles and Conditions

Since DDC is taught in many locations, it is the responsibility of the instructor to know state, local and municipal laws regarding the following subjects. Included are frequently asked questions about these subjects.

Slow-moving Vehicles

The warning signs for these vehicles vary from state to state.

- What color is the sign for your state? (A different color is used for religious groups in some states.)
- How fast can vehicles displaying this sign travel?
- Are these vehicles restricted to certain types of roads or highways?

School Buses

Regulations on school buses vary from state to state. Instructors should know the regulations for their state and be able to answer these questions.

- Traffic on which types of roads must stop when the red lights are flashing and the arm is out?
- Do the same laws apply to camp buses and church buses in your state?
- Can the driver of a stopped school bus in your state wave a car by? If so, what is the procedure?
- If a school bus is parked at the curb and loading or unloading students in front of a school, does traffic on the street have to stop?

NOTE: Several states have different definitions of what constitutes a divided highway, including physical barriers and actual measured width of a grass berm.

NOTE: Some states allow the bus driver to report the license plate of a person who illegally passes the bus. The police will issue a citation to the owner of the vehicle.

Emergency Vehicles

Regulations vary from state to state. Instructors should know the answers to these questions.

- What is an emergency vehicle in your state?
- Is there significance to the color of lights used on each vehicle?
- Which combinations of colors have special meanings?
- Which way does the law require a vehicle to move if an emergency vehicle approaches from behind?
- Are there special laws about lane usage during the time an emergency vehicle is passing?
- What about funeral processions without a police escort?

Move Over Law

All 50 states and the District of Columbia have “move over laws.” These laws have been passed to protect those responders on the shoulder of the road.

The laws cover ambulances, police vehicles and fire apparatus when engaged in the roadway or on the shoulder of the road with the emergency lights activated. (This is not just the four-way flashers!)

The law may cover other vehicles such as wreckers/tow trucks; state, county, or village DOT work vehicles; and hazmat team vehicles as well as incident command vehicles. Some states also include disabled vehicles in parts of their move over laws to protect the occupants of these prone vehicles on or near the roadway.

Animals

Instructors should know the answers to these questions.

- Which animals are most often hit in your state?
- Is there a special animal preserve your participants should know about?
- Is your state open range?
- What is the law in your state concerning posted cattle crossings, bridle trails, migratory birds and protected animals?

Recognize the Hazard: Animals

- You can't predict where or when an animal might cross the road.
- Crashes are caused by direct hits or swerving to miss an animal in the road.
- Large animals such as deer, elk, moose, cattle or bears may cause major vehicle crashes.
- Smaller animals such as dogs, cats or raccoons may also pose a danger, as you may swerve to avoid them.
- Be very cautious in areas that have been marked by traffic engineers with signs that warn of various animals which may be in the vicinity.
- As you have been advised earlier in this course, reading the roadway and road sides as far ahead as possible goes a long way in avoiding the potential of such incidents.
- In areas where the woodlands come very close to the roadway itself, remember that the posted speed limit may be too fast for this condition.
- A proper three-second plus following distance will go a long way in avoiding hitting a vehicle ahead of you if its driver is trying to make a panic stop to avoid a deer on the road.

Pedalcyclists

A lot of folks rely on a pedal powered craft – and on you, the driver of a motor vehicle – to get around safely. Some drivers feel that the road is solely their domain. But that's not the case. Generally, pedalcyclists are prohibited from using freeways and interstate highways. On all other roads, both large and small, pedal cycles belong and have a right to use the road just as motorists do.

Be considerate. Pedalcyclists have the same right as any motor vehicle to operate on the roadway. The same right-of-way rules apply to cars as pedalcycles. However, the consequences of error are much more severe for the pedal cyclist. Watch out for your fellow road users!

Be generous. Share the space and give cyclists extra trailing room. Allow cyclists to "take" a travel lane when a lane is too narrow to be shared safely. Be aware that your speed can create a "windblast" that can push a cyclist over and possibly into danger.

Be patient. When you think about it, a pedalcyclist may delay your trip by seconds; it's all the other cars clogging the roads at rush hour that will make you late for dinner. Pass with care. Give pedalcyclists a margin of at least five feet, or stay behind until you can safely pass. In inclement weather, give pedalcyclists extra trailing and passing room. Move carefully through intersections and yield to pedalcyclists as you would any other vehicle. Resist the temptation to pass a bicyclist just before making a right turn – chances are, the bicyclist is moving faster than you think.

Respect bike lanes. Bike lanes are intended to channel the paths of pedalcyclists and motorists and to provide for more predictable movements by each. They increase the comfort of both pedalcyclist and motorist in overtaking situations, and heighten motorist awareness of the presence of pedalcycles. Bike lanes are marked on the roadway with a solid white line and a diamond or bike icon with directional arrow and typically are located along the right-hand edge of the road. Don't drive in the bike lane unless preparing to turn right or park. Always yield to pedalcyclists before entering the bike lane. Never stop or park in the bike lane.

Motorcycle Riders

Our online Motorcycle Safety Program is up and running, developed in partnership with the Motorcycle Safety Foundation to help riders avoid collisions by being aware of – and knowing how to handle – common risks of riding in urban areas.

Intersections, speeding and alcohol consumption are examples of risk factors that generally can be managed. This new, two-hour program discusses these risks and others, in six interactive modules that help riders develop physical and mental skills to handle them safely.

Twenty-nine percent of all motorcycle rider fatalities involved alcohol-impaired riders.

Driver death rates for super sport motorcycles were four times as high as for cruiser/standard motorcycles.

When compared mph to mph, the death rate for motorcycle riders is 37 times greater than for a passenger or driver in a car going at the same speed.

What can you do?

- Drive defensively by constantly scanning the roadway, looking for hazards.
- Cooperate with motorcycle riders on the road.
- Use common sense and courtesy and obey the law when interacting with motorcycle riders.
- Use the “what-if” strategy when driving near a motorcycle rider.
 - Use a safe following distance when behind a motorcycle.

Pedestrians

Pedestrians also affect traffic. Why are we talking about pedestrians as a traffic condition? Pedestrian traffic is part of all traffic.

What can you do?

- Be a better, safer driver by giving pedestrians a human dimension. After all, at some point, we are all pedestrians.
- Slow down; use the “what if” strategy since you can’t predict what a pedestrian might do.
- Yield the right of way to pedestrians in crosswalks. Be patient with elderly or disabled pedestrians; they may take longer to cross and may not be able to see or hear well.
- Never wave pedestrians across the street. In heavy traffic areas, other drivers might not see the pedestrians crossing. Those vehicles could hit the pedestrians.
- In residential areas and school zones, watch for children, especially on school days, holidays or in summer. Remember, children are unpredictable.



Section • 10 Aggressive Driving and Road Rage

Aggressive driving is defined as “driving in a selfish, bold or pushy manner, without regard for the rights or safety of other users of the roadways.” Typical acts of aggressive driving include speeding, tailgating, making frequent and sudden lane changes, not yielding the right of way and disregarding traffic signals.

Even some seemingly harmless maneuvers are considered aggressive if they are done knowingly and without regard for other drivers. Motorists who are victims of aggressive driving become aggressive by gesturing to the offending motorist, laying on the horn for an extended time, flashing headlights or bright lights or getting into verbal altercations.

When aggressive driving becomes extreme, it can escalate into road rage. Road rage is defined as “using a vehicle as a weapon with intent to do harm or physical assault of an individual as a result of a traffic occurrence.” Committing road rage is a criminal offense.

What Causes Aggressive Driving?

Several factors contribute to aggressive driving. Driving conditions, such as poor weather, heavy traffic or road construction, can create frustrating traffic jams and delays. Other drivers can be annoying if they are inattentive or careless. They may be impaired, talking on a cell phone or rubbernecking. Finally, a driver’s own state of mind when getting into the vehicle can contribute to aggression. If a driver is tired, feeling stressed or feeling that life is out of control, that driver may vent his/her frustration on others.

The myths and realities of driving

There are several myths that can cause people to drive aggressively. One is that aggressive driving puts the motorist in control. People who believe this may tailgate, speed and cut others off—all because it makes them feel in control.

The reality is that aggressive driving can quickly put a motorist out of control. Tailgaters don't have much time to react if the person in front of them slams on the brakes. Speeders can quickly spin out of control if they hit a slippery spot or need to react suddenly to another vehicle on the road.

Another myth is that driving is a win-lose situation. People who believe this want to be first on the road—to be the winner. They speed up when others attempt to pass, or they refuse to let others pull in front of them. The reality is that people are winners only if they make it to their destination. If their “me first” attitude causes a collision, they won't be first—in fact they may be dead last.

A third myth is that aggressive drivers are out to get the people they harass. When someone tailgates, for example, it is hard not to take it personally. A typical response may be to slam on the brakes or to gesture obscenely. However, aggressive drivers rarely single out a particular person to harass. Instead, they harass anyone who gets in their way.

Another myth is that people have an absolute right to take matters into their own hands—to punish bad drivers. If someone is cut off, the first reaction might be to retaliate—to show that idiot how to drive! The reality is that there are people who will always break traffic laws. By trying to punish or get even with these people who are probably already angry, a motorist could end up as their target.

The fifth myth is that it is possible to make up time on the road. If it takes 30 minutes to get to a destination, drivers may feel they can allow 25, and then make up the time by speeding or running yellow lights. It is more likely that traffic, construction or other unforeseen circumstances will cause them to lose time!

The sixth myth about driving is that time spent in the car is wasted. To minimize this wasted time, drivers hurry to their destination. However, in today's fast-paced world, everyone can use more personal time. Time in the car may be just the therapy needed to relax and unwind.

The last myth is that people who are courteous don't need to worry about aggressive drivers. Nothing could be further from the truth. Even people who obey all the traffic laws can become targets of aggressive drivers if they get in the way. It is always important to stay aware, watch for aggressive drivers and drive defensively.

Overcoming Aggressive Driving

To overcome aggressive driving, it is important to stop believing the myths and start facing up to the realities. Once motorists accept that aggressive driving is dangerous and doesn't get anyone ahead, they can start replacing their negative driving actions with positive ones.

Myths, Realities and Our Actions

Myth	Sample Negative Action	Reality	Sample Positive Action
When you drive aggressively, you are in control.	Tailgating, speeding, and jerking in and out of lanes	Aggressive driving can quickly put you out of control. You are more likely to be in control if you relax while you are driving.	Allowing enough space between your vehicle and the vehicle in front of you Driving in the appropriate lane
Driving is a win-lose situation and the vehicle in front is the winner.	Treating a passing vehicle like a race car opponent, and refusing to allow the car to pass	The winners on the road are the ones who make it to their destinations.	Allowing others to pass Making room for them in front of you
Aggressive drivers are out to get you.	Taking aggressive driving personally Gesturing to the other driver	Other drivers' mistakes and actions are not personal affronts.	Assuming that the other driver made an honest mistake or is just having a bad day
You have a right to take matters into your own hands.	Getting even. If someone cuts you off, feeling that you need to pass that driver and cut him/her off.	There will always be people breaking the law. You should leave the policing to the proper officials.	Ignoring vehicles that break the law and concentrating on your own safe driving
It is possible to make up time on the road.	Driving as fast as possible when you are running late	Because of traffic, construction, and other unforeseen events, few trips can be made in the minimum amount of time.	Allowing enough time so that the trip can be relaxing
Time in the car is wasted time.	Feeling nervous and anxious in the car Hurrying to get to your destination	Time in the car can be your own personal time where you get your own personal space.	Listening to relaxing music Thinking about something pleasant
Courteous drivers don't need to worry about aggressive driving.	Neglecting to watch for other drivers who are aggressive	Even if you are a courteous and safe driver, you have to deal with those drivers who are aggressive.	Watching carefully for aggressive drivers Driving defensively

Reflect, Reframe, Refocus

We teach drivers to control their own aggressive feelings by remembering the three R's: reflect, reframe, and refocus. **Reflect.** We teach drivers to look at the real reason they are acting aggressively behind the wheel. Is it a problem that is being made better by their aggressive driving? Is it something they can control or change at that moment?

1. **Reframe.** After answering the “reflect” questions the driver should be able to “reframe” his or her state of mind. For example, the real cause or problem is not being made better by aggressive driving; it is, in fact, causing greater stress and could lead to bigger problems, such as a crash or moving violation.
2. **Refocus.** The last step to reducing aggressive behavior is to refocus one's thoughts. Drivers should think about something other than the initial problem. Perhaps they could refocus on maintaining a safe following distance, focus on the traffic around them, and think about a relaxing situation they can remember.

Dealing with aggressive drivers

The Department of Transportation defines “aggressive driving” as “driving behavior that endangers or is likely to endanger people or property.” The National Highway Traffic Safety Administration (NHTSA) says aggressive drivers are more likely to:

- Speed, tailgate, fail to yield, weave in and out of traffic, pass on the right, make improper/unsafe lane changes, run stop signs and red lights, make hand/facial gestures, scream, honk, flash their lights.
- Climb into the anonymity of a vehicle and take out their frustrations on other drivers.
- Allow their high frustration levels to diminish any concern for fellow motorists.
- Be impaired by alcohol/drugs and drive without safety belts.

Who are aggressive drivers?

A majority of drivers involved in road rage incidents are males between the ages of 18 and 26. But in one study there were hundreds of cases where the “rager” was between 26 and 50. Even more surprising, in a study conducted recently, the most common drivers to be involved in road rage incidents were what might be termed “soccer moms” – women with juvenile passengers driving station wagons or minivans.

When you come right down to it, there is no typical aggressive driver. While many are young males with histories of criminal activity and violence, not to mention drug and alcohol problems, there are also some aggressive drivers among successful, well-educated people. While most are men, one study showed that at least 4% were women.

What causes road rage?

The incidents that lead to aggressive driving behavior are often trivial in nature, and not something you might think would cause the explosions that characterize road rage. Some reasons given for episodes of road rage include arguments over parking spaces, the cutting off of another driver or not allowing another driver to pass, minor traffic incidents, obscene gestures, loud music, misuse of the horn, driving too slow, tailgating, not using a turn signal, etc.

But violent traffic disputes are RARELY the result of a single incident. Rather, they are the cumulative result of a long series of stressors in the driver's life. The traffic incident that turns violent is often the "last straw."

NHTSA's three factors

NHTSA has identified three factors that are linked to aggressive driving: lack of responsible driving behavior, a reduced level of traffic enforcement, and increased congestion and travel in urban areas. Let's look more closely at each of them:

- **Lack of responsible driving behavior** – On the road, the focus is often on individual rights and freedom – a "me first" philosophy – not on responsibility to others with whom we share the road. Driving should be cooperative, not a competitive sport.
- **Reduced levels of enforcement** – The perceived risk of being apprehended for a traffic violation is directly related to the level of traffic enforcement. Unfortunately, many jurisdictions have cut back on traffic enforcement because of budget constraints.
- **More travel/congestion, especially in urban areas** – Since 1987, the number of miles driven in the United States has increased at least 35%, while the number of miles of available roads has increased only 1%. Drivers find themselves responding to the frustrations of driving in high-density traffic areas by driving and acting aggressively.

The cost of aggressive drivers

Most managers realize that unsafe driving behaviors lead to accidents, and also to lost productivity, repair costs, and higher insurance rates that are associated with accidents. However, managers often fail to factor in the cost of aggressive driving in terms of higher fuel, tire and maintenance costs. Underestimating these impacts can devastate profits.

Aggressive drivers tend to push their vehicles hard. Typically, they accelerate hard (adding stress to the engine and transmission, and wasting fuel); speed (driving up fuel consumption and increasing tire wear from tire heating); and tailgate (leading to greater frequency of heavy brake application and causing early wear out of brake systems and tires). Aggressive drivers cost companies a significant amount more than drivers who generally follow the speed limit, maintain proper distance between vehicles and slow down more gradually.



Section 11 • Mature Drivers

According to the National Policy and Resource Center on Women and Aging: “Dignity, self-respect, autonomy, for most people, go together with driving an automobile. But increasingly people believe that many mature drivers are an unnecessary risk on our roadways. Indeed, studies show that certain skills necessary for safe driving deteriorate with age. Consequently, there is a growing concern regarding the safety of mature drivers and the public in general.”

Age has both positive and negative effects on driving ability. For example: Young drivers between 16 and 25 receive more citations, are responsible for more traffic crashes and have a higher fatality rate due to motor vehicle collisions than any other group. While they have the best physical conditions, the problems of young drivers are inexperience and aggressive driving. As people get older, most have few moving violations and are less likely to be responsible for a traffic crash. Maturity and additional years of driving experience make a big positive difference.

Statistics show, however, that mature drivers are more likely than either middle-aged or younger drivers to be in a two-vehicle collision. In fact, for drivers over age 75, the proportion involved in collisions is comparable to that of the 16-25 year old group.

Mature Driver Facts

- The most dangerous time for mature drivers to be on the road is at night, even though these drivers average 2.5 vehicle trips by night per week.
- The highest fatal crash rate for mature drivers at night occurs on rural, non-interstate two-lane roads.
- When a mature driver is involved in a crash of any severity level, it is more likely to be a multiple-vehicle collision on a non-interstate road in an urban area.
- Mature drivers tend to self-regulate their driving. They tend to avoid rush hour traffic, poor weather conditions and night driving.

Effects of Aging on Physical Abilities

Clinical studies show that vision, motor-reaction time, and certain cognitive abilities decline with age. All of these abilities are important to safe driving, especially vision and reaction time.

Driving is based 90% on visual cues, and research on the combined effects of visual and cognitive abilities shows that many mature drivers tend to have difficulty processing hazard cues which enter into their field of vision. Peripheral vision at the age of 70 is about 150 degrees compared to 175 degrees at age 20. Mature drivers are involved in more side-impact collisions, possibly due to reduced peripheral vision and visual acuity.

Other physical problems may include:

- Limited range of motion
- Fatigue
- Slower information-processing ability

Mature Driver Safety Tips

- Have eyes tested periodically. As stated above, field of vision and acuity decline with age.
- Make sure the windshield is clear and the wipers are in good condition.
- Clean headlights periodically. This will enable the driver to see and be seen.
- Avoid glare. As people get older they are less able to recover from glare. The decreased ability is a heightened risk. If driving at night, allow enough time for the eyes to adjust to decreased light.
- Avoid left lane driving if possible. When confronting oncoming headlight glare, turn the eyes to the side of the road. Do not look directly into it.
- Reduce distractions. Hearing acuity also declines with age. Keep radios and air conditioning or heater blowers low to reduce noise. If driving with a partner or companion, have him or her help look for signs and/or other traffic and obstructions when backing or turning.
- Communicate. Use proper signaling and the horn, if needed. Always let other drivers and pedestrians know your intentions.
- Drive smart. Always check mirrors and blind spots when changing lanes.
- Listen. Listen to family and friends regarding driving problems they may have observed.

State Licensing Policies for Mature Drivers

Currently 10 states and the District of Columbia have special re-licensing policies based on age. Most states, however, continue to assess drivers with impairments on an individual basis.

Nevertheless, based on driving statistics and the aging of America, increased attention is being given to traffic crashes involving people at older ages. For a state-by-state chart of re-licensing procedures, look at the Insurance Institute for Highway Safety's website: iihs.org.