Highway-Rail Grade Crossing Safety & Enforcement Manual

2003
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I. What Is Operation Lifesaver?

Operation Lifesaver is an active continuing public education program designed to reduce the number crashes, deaths, and injuries at highway-rail grade crossings and on railroad rights-of-way. The three areas of concentration are education, engineering, and enforcement. To meet its lifesaving goals, the program strives to increase public awareness of the highway-rail crossing environment and improve driver and pedestrian behavior at these intersections by encouraging compliance with the traffic laws relating to crossing signs and signals.

This booklet seeks to assist law enforcement officers and other first responders to safely investigate those crashes when they do occur.

Additional copies are available free of charge by writing the Illinois Commerce Commission, Rail Safety Section, 527 East Capitol Avenue, Springfield, Illinois 62701, or by calling 217/782-7660 or visit the OLI website.
Helpful Resources:

Federal Railroad Administration
Office of Public Affairs 202/493-6024
Website: www.fra.dot.gov

Operation Lifesaver, Inc.
National Support Center 800/537-6224
Website: www.oli.org

Federal Highway Administration
Office of Public Affairs 202/366-0660
Website: www.fhwa.dot.gov

Federal Transit Administration
Office of Safety and Security 202/366-2896
Website: www.fta.dot.gov

National Highway Traffic Safety Administration
Office of Public Affairs 202/366-8550

National Transportation Safety Board
Central Regional Office 630/377-8177
Website: www.ntsb.gov

American Trucking Associations
Safety Policy Department 730/838-1847

Toledo, Peoria & Western Railway Corp.
Make appropriate selection from recording 309/698-2600

Total Logistic Control, LLC
(formerly Rochelle RR) 815/562-2350
Main Office ext. 112

Union Pacific Railroad Co.
(Also CHTT/CNW/CWI/MP/SPCSL/SSW)
Crossing Hot Line 800/848-8715

Vandalia Railroad Co.
7am-3:30pm 618/283-2452
Patrick Randolph/Gen.Mgr. Pager 800/612-5749

Wisconsin Central, Ltd.
Chief Dispatcher 715/345-2461

Patrick Randolph/Gen.Mgr. Pager 800/612-5749

Wisconsin & Southern Railroad Co.
Dispatcher—6am-8pm M-Sat 414/438-8835
(No one available on Sundays)
II. State Statutes Pertaining to Highway-Rail Grade Crossings

5/11-1203. Moving heavy equipment at railroad grade crossings

(a) No person shall operate or move any crawler-type tractor, power shovel, derrick, roller, or any equipment or structure having a normal operating speed of 10 or less miles per hour, or, for such equipment with 18 feet or less distance between two adjacent axles, having a vertical body or load clearance of less than 9 inches above a level surface, or, for such equipment with more than 18 feet between two adjacent axles, having a vertical body or load clearance of less than ½ inch per foot of distance between such adjacent axles above a level surface upon or across any tracks at a railroad grade crossing without first complying with this Section.

(b) Notice of any such intended crossing shall be given to a superintendent of such railroad and a reasonable time be given to such railroad to provide proper protection at such crossing.

(c) Before making any such crossing the person operating or moving any such vehicle or equipment shall first stop the same not less than 15 feet nor more than 50 feet from the nearest rail of such railway and while so stopped shall listen and look in both directions along such track for any approaching train and for signals indicating the approach of a train, and shall not proceed until the crossing can be made safely.

(d) No such crossing shall be made when warning is given by automatic signal or crossing gates or a flagman or otherwise of the immediate approach of a railroad train or car.

ARTICLE XII. SPECIAL STOPS REQUIRED

5/11-1201. Obedience to signal indicating approach of train

(a) Whenever any person driving a vehicle approaches a railroad grade crossing such person must exercise due care and caution as the existence of a railroad track across a highway is a warning of danger and under any of the circumstances stated in this Section, the driver shall
stop within 50 feet but not less than 15 feet from the nearest rail of the railroad and shall not proceed until he can do so safely. The foregoing requirements shall apply when:

1. A clearly visible electric or mechanical signal device gives warning of the immediate approach of a railroad train;
2. A crossing gate is lowered or a human flagman gives or continues to give a signal of the approach or passage of a railroad train;
3. A railroad train approaching a highway crossing emits a warning signal and such railroad train, by reason of its speed or nearness to such crossing, is an immediate hazard;
4. An approaching railroad train is plainly visible and is in hazardous proximity to such crossing;
5. A railroad train is approaching so closely that an immediate hazard is created.

(b) No person shall drive any vehicle through, around, or under any crossing gate or barrier at a railroad crossing while such gate or barrier is closed or is being opened or closed.

(c) The Department, and local authorities with the approval of the Department, are hereby authorized to designate particularly dangerous highway grade crossings of railroads and to erect stop signs thereat. When such stop signs are erected the driver of any vehicle shall stop within 50 feet but not less than 15 feet from the nearest rail of such railroad and shall proceed only upon exercising due care.

(d) At any railroad grade crossing provided with railroad crossbuck signs, without automatic, electric, or mechanical signal devices, crossing gates, or a human flagman giving a signal of the approach or passage of a train, the driver of a vehicle shall in obedience to the railroad crossbuck sign, yield the right-of-way and slow down to a speed reasonable for the existing conditions and shall stop, if required for safety, at a clearly marked stopped line, or if no stop line, within 50 feet but not less than 15 feet from the nearest rail of the railroad and shall not proceed until he or
she can do so safely. If a driver is involved in a collision at a railroad crossing or interferes with the movement of a train after driving past the railroad crossbuck sign, the collision or interference is prima facie evidence of the driver’s failure to yield right-of-way.

(d-5) No person may drive any vehicle through a railroad crossing if there is insufficient space to drive completely through the crossing without stopping.

(e) It is unlawful to violate any part of this Section. A first conviction of a person for a violation of any part of this Section shall result in a mandatory fine of $250; all subsequent convictions of that person for any violation of any part of this Section shall each result in a mandatory fine of $500.

(f) Corporate authorities of municipal corporations regulating operators of vehicles that fail to obey signals indicating the presence, approach, passage, or departure of a train shall impose fines as established in subsection (e) of this Section.

5/11-1011. Bridge and railroad signals

(a) No pedestrian shall enter or remain upon any bridge or approach thereto beyond the bridge signal, gate, or barrier after a bridge operation signal indication has been given.

(b) No pedestrian shall pass through, around, over, or under any crossing gate or barrier at a railroad grade crossing or bridge while such gate or barrier is closed or is being opened or closed.

(c) No pedestrian shall enter, remain upon or traverse over a railroad grade crossing or pedestrian walkway crossing a railroad track when an audible bell or clearly visible electric or mechanical signal device is operational giving warning of the presence, approach, passage, or departure of a railroad train.

(d) A violation of any part of this Section shall result in a fine.

(e) Local authorities shall impose fines as established in subsection (d) for pedestrians who fail to obey signals indicating the presence, approach, passage, or departure of a train.

X. EMERGENCY PHONE NUMBERS

The numbers listed are restricted for
EMERGENCY USE ONLY,
DO NOT USE FOR NON-EMERGENCY CONTACT!!

<table>
<thead>
<tr>
<th>Company</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alton &amp; Southern Railway Company</td>
<td>618/482-7774</td>
</tr>
<tr>
<td>General Yard Master</td>
<td>618/482-7763</td>
</tr>
<tr>
<td>Yard Master</td>
<td>618/482-7763</td>
</tr>
<tr>
<td>Amtrak Consolidated Operations Center (CNOC)</td>
<td>800/424-0217</td>
</tr>
<tr>
<td>Amtrak Operations</td>
<td>800/424-0217</td>
</tr>
<tr>
<td>ext. (2307)</td>
<td></td>
</tr>
<tr>
<td>Amtrak Police</td>
<td>800/331-0008</td>
</tr>
<tr>
<td>Aurora, Elgin &amp; Fox River Electric Company</td>
<td>630/357-4653</td>
</tr>
<tr>
<td>Operations</td>
<td>800/232-0144</td>
</tr>
<tr>
<td>Belt Railway Company of Chicago Dispatcher</td>
<td>708/496-4104</td>
</tr>
<tr>
<td>or</td>
<td>708/496-4105</td>
</tr>
<tr>
<td>Bloomer Line</td>
<td>217/784-4923</td>
</tr>
<tr>
<td>Answering Machine Operations Mgr.</td>
<td>217/784-4923</td>
</tr>
<tr>
<td>Burlington Northern Santa Fe Corp Resource Center</td>
<td>800/832-5452</td>
</tr>
<tr>
<td>Canadian National Railway Co. Police Comm. Center</td>
<td>800/464-9239</td>
</tr>
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<td>Canadian National Railroad Co. Police Comm. Center</td>
<td>800/465-9239</td>
</tr>
<tr>
<td>Chicago &amp; Western Indiana RR Co.</td>
<td>800/848-8715</td>
</tr>
<tr>
<td>UP Crossing Hot Line</td>
<td>800/848-8715</td>
</tr>
<tr>
<td>Chicago Heights Terminal Transfer RR Co.</td>
<td>800/472-3087</td>
</tr>
<tr>
<td>UP Crossing Hot Line</td>
<td>800/472-3087</td>
</tr>
<tr>
<td>Chicago, Peoria &amp; Western Railway Co.</td>
<td>708-563-5308</td>
</tr>
<tr>
<td>Main Operations M-F 7am—5pm</td>
<td>708-563-5308</td>
</tr>
<tr>
<td>Chicago Rail Link (LaSalle &amp; Bureau Cty.)</td>
<td>773-721-4000</td>
</tr>
<tr>
<td>6am—9pm (No 24 hr number)</td>
<td>773-721-4000</td>
</tr>
<tr>
<td>(after 9pm goes to voice mail)</td>
<td></td>
</tr>
<tr>
<td>Chicago Short Line Railway Co. Trainmaster</td>
<td>773/768-6405</td>
</tr>
<tr>
<td>Chicago, South Shore &amp; South Bend RR</td>
<td>800/873-1486</td>
</tr>
<tr>
<td>Dispatcher</td>
<td>800/873-1486</td>
</tr>
<tr>
<td>or</td>
<td>ext. 229</td>
</tr>
<tr>
<td>Chicago, W. Pullman &amp; Southern RR Co.</td>
<td>773/721-4000</td>
</tr>
<tr>
<td>(Now Chicago Rail Link)</td>
<td>773/721-4000</td>
</tr>
</tbody>
</table>
Enforcement Programs Offered Locally in Illinois

1. **Officer on the Train** – If interested in this program, please contact the railroad special police. This program has officers ride in a cab of a locomotive and spot violations of the grade crossing laws. The violators are then issued tickets.

2. **Grade Crossing Collision Investigation Course** - A course designed to equip law enforcement officers with the knowledge of how to investigate a crossing collision. Since this is a unique type of traffic collision, information is provided in the course to help bridge the communication gap. Course length can vary from 4 hours to 16 hours and POST-approved continuing education hours are earned. This course is offered free of charge periodically around the state.

If either of the two above programs are of interest to you, contact the director of the local multi-training unit office.

Highway/Rail Grade Crossing Blockage

It is unlawful in Illinois for a railroad to permit any train, railroad car or engine to obstruct public travel at a highway-rail grade crossing for a period in excess of ten minutes, except where the train is continuously moving or cannot be moved due to circumstances beyond the railroad's control. 625 ILCS 5/18c-7402(b) (1998).
Every railroad has the responsibility to operate in such a manner as to minimize obstructions of emergency vehicles at crossings. If any such obstruction occurs and the train crew is aware of the obstruction, the crew is to take immediate action, consistent with safe operating procedures, to remedy the situation. 625 ILCS 5/18c-7402 (a) (1998).

**Penalty**
A violation is a petty offense and a fine is affixed of not less than two hundred nor more than five hundred dollars if the duration of the obstruction is in excess of ten minutes but no longer than fifteen minutes. If the duration exceeds fifteen minutes, the violation shall be a business offense and the following fines may be imposed:

1. If the duration of the obstruction is in excess of fifteen minutes but no longer than twenty minutes, the fine is five hundred dollars.
2. If the duration is in excess of twenty minutes but no longer than twenty-five minutes, the fine shall be seven hundred dollars.
3. If the duration is in excess of twenty-five minutes, but no longer than thirty minutes, the fine shall be nine hundred dollars.
4. If the duration is in excess of thirty minutes but no longer than thirty-five minutes, the fine shall be one thousand dollars.
5. If the duration of the obstruction is in excess of thirty-five minutes, the fine shall be one thousand dollars plus an additional five hundred dollars for each five minutes of obstruction in excess of twenty-five minutes. ILCS 5/18c-7402 (1998).

### III. Laws Governing Railroad Employees Involved in Railroad Accidents

Trains involved in fatalities and collisions involving a motor vehicle or other highway conveyance where roadways cross railroad lines are governed by federal laws and regulations, and they are not subject to state or local highway laws.

Railroad employees involved in accidents at grade crossings or other locations have no

railcar movement. Do not step on coupler or uncoupler lever.

Never go on top of electric trains, under trains powered by third rail, or any other equipment under catenary wires.

Do not spray water at or near catenary wires or power facilities.

Wait, for a qualified railroad employee to ground electricity.

If an electric wire or a victim is in water, do not step into the water.

Do not touch any live wire, third rail, or a person in contact with a live wire.

Keep hands at least 15 feet from a person in contact with a live wire.

Keep clear of wires and power stations. Always maintain at least 15 feet of clearance between the electrification system and personnel or equipment.

Follow rescue procedures for electric shock and emergency medical treatment.
IX. General Railroad Safety Procedures
Here are basic railroad safety procedures that should always be followed to avoid unsafe situations.

Stay off the tracks.

Always expect a train. Trains can move on any track, in either direction, at any time. Even if you see one train pass, stay alert and expect another train.

Do not walk near the tracks, except in an emergency. If you must go near the tracks, always walk at least 15 feet outside of the tracks.

Never step on the rails when crossing the tracks. They are slippery, especially when wet.

Step clear of any switch or apparatus on the tracks. Railroad switches and sidings are controlled from a centralized system many miles away; switches can move quickly without warning and could trap or injure hands and feet.

Stay at least 15 feet away from all train equipment. Do not lean on trains or locomotives.

Stand clear of passing trains.

Stay away from downed signal wires or electric overhead wires—at least 15 feet.

Do not climb under or between train cars.

Do not park within 15 feet of the railroad tracks.

Keep a constant lookout for approaching trains.

Trains can take over a mile to stop; emergency lights CANNOT stop a train at the scene. After obtaining permission from the conductor to cross through a standing train, choose a railcar with crossover platform and handhold. Maintain a firm grip; be prepared for obligation to submit to a breath or toxicological test requested by a state or local law enforcement authority, unless the authority has specific cause to believe a particular individual they wish to test has committed a criminal law violation.

Section 20106 of Title 49 of the United States Code (previously Section 205 of the Federal Railroad Safety Act of 1970) prohibits states from adopting laws with respect to railroad safety if the United States Department of Transportation has adopted standards governing the subject matter, unless the state requirement is necessary to deal with a unique local problem and is not incompatible with the federal standards.

Localities are not permitted to adopt laws with respect to railroad safety under any circumstances. The federal regulatory authority has been delegated to the Federal Railroad Administration (FRA).

They govern who must be tested and who may not be tested, and also prescribe precise standards and procedures that must be followed in performing testing. In adopting these regulations, the FRA specifically determined that, in the absence of reasonable cause to believe a particular individual is impaired based on his appearance or behavior, train crews should not be required to submit to testing in connection with the collision of a train or a motor vehicle or other highway conveyance at a rail/highway grade crossing. (See 49 C.F.R. 219.201 (b).

In addition, testing is normally not permitted when a train hits a person on the railroad’s right-of-way. Section 219.13 specifies that the regulations in Part 219 of 49 C.F.R. have the preemptive effect contemplated by Section 20106 of Title 49 of the United States Code, and therefore, states and localities may not adopt laws requiring employees to submit to testing after an accident that does not involve reckless conduct in violation of criminal law.

State and local law enforcement authorities can call the Federal Railroad Administration Office in Chicago at 312/353-6203 to obtain further information concerning the permissible treatment of railroad employees involved in an accident.

Attached are some examples of Engineer Certificates, which
are required to be carried by train engineers in lieu of a drivers license.

Have your dispatcher obtain as much information from the train dispatcher prior to your arrival at the scene:

⇒ Look for signs that hazardous material may be present
⇒ Stay uphill and upwind from the incident
⇒ Isolate the area
⇒ Do not walk into, touch, or inhale any of the released material
⇒ Attempt to identify the product either by placard or waybill information from train crew
⇒ Request additional assistance

Expert advice and assistance can be obtained by calling CHEMTREC, 1-800-424-9300. CHEMTREC can usually provide hazard information warnings and guidance when given the name of the product and the nature of the problem. These general procedures are suggested guidelines for the initial response phase and are not intended to be anything else.

Fire Department

⇒ The fire department personnel shall assume control of the incident and take whatever action necessary to contain the material.

Only after you obtain knowledge of material involved:

⇒ Rescue injured. Remove them to safe area if in danger and administer first aid.
⇒ Keep all ignition sources away from area.
⇒ Protect life and property. This phase may require evacuation of people from area. The recommended distance is a minimum of 2,000 feet. The course of action to be taken depends on conditions and the materials involved.
⇒ Contact the railroad to obtain any necessary information pertaining to the hazardous material. Determine the railroad’s response procedures and secure their involvement and expertise in the decision-making process concerning this incident.
In case of a crossing emergency:
⇒ Locate the 800 number placard in close proximity to the crossing if available.
⇒ Notify railroad of crossing DOT number and milepost location.
⇒ Inform dispatcher as to the nature of the emergency. They will contact nearby train crew, if train needs to be stopped.

VIII. General Procedures for Hazardous Material Incidents

INITIAL RESPONSE OF FIRST ON SCENE

Be aware that any rail incident can involve hazardous materials. Not all hazardous material rail cars or truck trailers will be placarded. Some are not required to be marked while others may be improperly placarded.

Be Alert and Cautious at any incident as hazardous material may be involved.
IV. What to do if a Crossing Collision Occurs
Following is a copy of the Grade Crossing Collision Investigation Checklist. To assist in your investigation, please keep in mind the following information:

The engineer is the person operating the train.
The conductor is in charge of the train.
Locomotive engineers are NOT required to have a motor vehicle operators’ license while operating a locomotive. Instead, the engineer must display a Federal Certification Card. Always be aware of the possibility of a hazardous material incident.

GRADE CROSSING COLLISION INVESTIGATION CHECKLIST

Engineer Information:
☑ Name
☑ Address
☑ DOB
☑ Phone
☑ Time of Collision
☑ Train Speed Estimate at Collision
(Operators license number not required on accident report)

Conductor Information:
☑ Name
☑ Address
☑ DOB
☑ Phone
(Operators license number not required on accident report)

Train Information:
☑ Lead engine number
☑ Train ID number (from Conductor)
☑ Number of cars in train
☑ Railroad Co. name/address (owns tracks)
☑ Name of Railroad Co. operating train
☑ Additional crewmembers

How to Identify a Crossing.
The Association of American Railroads and the U.S. Department of Transportation developed a crossing identification system jointly. This system gives each at-grade and separated crossing a unique identify by the assignment of an inventory number. The number, composed of six numerals and one letter, is usually attached to the crossbuck or signal mast. The abbreviation of the railroad responsible for the trackage that crossing may be found above the number. This number should be included in your report.

U.S. DOT crossing inventory number affixed to active warning device crossing.
If it is necessary to stop a train by flagging, remember that a train takes much longer to stop than an automobile. A freight train traveling at 60 miles per hour could take up to 1 ½ miles to stop, while one traveling at only 30 miles per hour could take 2/3 of a mile to stop. An officer intending to stop a train must be at least the train’s stopping distance from the hazard before signaling the engineer. If time permits, always assume the greatest distance.

Do not stop your patrol car on the tracks. Park your car nearby, turn on the emergency light to attract attention, position yourself near the tracks. The universal railroad stop signal is a lighted flare, swung slowly back and forth horizontally across your body. The locomotive engineer will stop the train as quickly as possible. If it is impossible to use a highway flare, a flashlight may be used at night, or a brightly colored object in the daytime. However, a flare should be used whenever possible, day or night.

VII. Highway-Rail Grade Crossing Signal Malfunctions

Automatic crossing warning signals such as flashing light, gates and bells are designed to activate whenever a train approaches a highway-rail grade crossing. Operating times may vary depending on the type of control equipment used.

Occasional problems may develop which cause the signal to activate in a fail-safe manner so the signal will function even if no train is approaching the crossing. In less than one percent of the time, however, a failure of the system may occur in which there is minimal or no warning time before the train reaches the crossing.

A frequent cause of highway-rail crossing signal failures is vandalism. Police officers can assist by watching for trespassers or incidents of vandalism along the tracks, such as tampering with signal housings. Crossing signals should be observed for shattered lenses, which could reduce warning effectiveness substantially.

If you encounter problems with the railroad’s failure to repair signals/gates, you may call the Illinois Commerce Commission, Rail Safety Section at 217/782-7660.

Engine Information:
- ☑ Headlight working?
- ☑ Horn working?
- ☑ Bell working?

Miscellaneous Information:
- ☑ RR Car number on crossing?
- ☑ Distance to last RR car from POI?
- ☑ Witnesses

AT THIS POINT, IF NO FURTHER INFORMATION IS REQUIRED, CONSIDER RELEASING THE TRAIN

Crossing Signals:
- ☑ Light/gate bell combination?
- ☑ Light/bell combination?
- ☑ Passive warning (crossbucks)?
- ☑ Wig-wag type?
- ☑ Lights flashing/bells ringing your arrival?
- ☑ Crossing gates down? (If devices not working your arrival, explain)

Other Crossing Characteristics:
- ☑ Advance warning signs in place?*
- *Distance from this sign to nearest rail?
- ☑ Crossing surface (rubber, asphalt, etc.)
- ☑ Pavement markings?
- ☑ DOT/AAR crossing ID number?
- ☑ Width of right-of-way (ft)?
- ☑ Visual obstructions on driver approach?
- ☑ Citation given if warranted (FTY, FTS, etc.)?
V. Reporting Vehicular/Train Crashes

Accurately report vehicular crashes involving trains on the Illinois Traffic Crash Report is essential to the grade crossing safety experts. The following is a copy of the Illinois Traffic Crash Report.

Be sure to include—{Narrative List}.
- DOT Number of Crossing
- Vehicle #2 was a train
- Approximate train speed
- Train Number
- Lead Engine #
- Number Engines
- Number of Railcars
- Headlight Working
- “Ditch” Light Working
- Bell Sounding On Engine
- List crossing warning devices if equipped, to include round yellow advance warning sign; pavement marking, crossbuck; flashing lights; overhead lights, bell (at crossing) and gates. Describe if working or not.

List any other conditions not found in boxes, in the narrative portion.

VI. How To Stop A Train In An Emergency

When, in case of emergency, a train should be stopped to avoid a threat to life or property, contact the railroad dispatcher first. A listing of the railroads and their 24-hour emergency telephone numbers is included in this manual.