



## Profile of Rail-Related Injuries for Minneapolis-St. Paul

A pedestrian or other road user is involved in a collision with a train every three hours in the U.S., and 1 in 10 of these involves children ages 19 and under. These incidents are often deadly, and, most importantly, are preventable. They are primarily the result of two types of incidents:

- Trespassing injuries occur when a person is injured while on private railroad property without permission. They are most often pedestrians taking a shortcut across or along tracks, but also include loiterers and those engaging in recreational activities such as hunting or jogging.<sup>1</sup>
- Railroad crossing injuries are when a person or highway user is struck by a train while
  attempting to cross at a designated crossing where tracks intersect a roadway or walkway at the
  same level.

This profile describes data reported to the Federal Railroad Administration (FRA) on rail-related injuries occurring in Minneapolis—St. Paul. Data are for years 2011 to 2020 and are combined for the Minnesota counties of Ramsey, Anoka, Hennepin, Washington, Dakota, and Scott (no injuries reported for Carver County). Injuries are divided into trespassing injuries and railroad crossing injuries. Data include both fatal and nonfatal rail-related injuries. Excluded from this profile are injuries to rail passengers and rail workers, as well as cases of suicides and attempted suicide.

This report and other rail safety resources for families, educators and community partners can be downloaded from the **Safe Kids Rail Safety Station** online hub at safekids.org/RailSafetyStation.

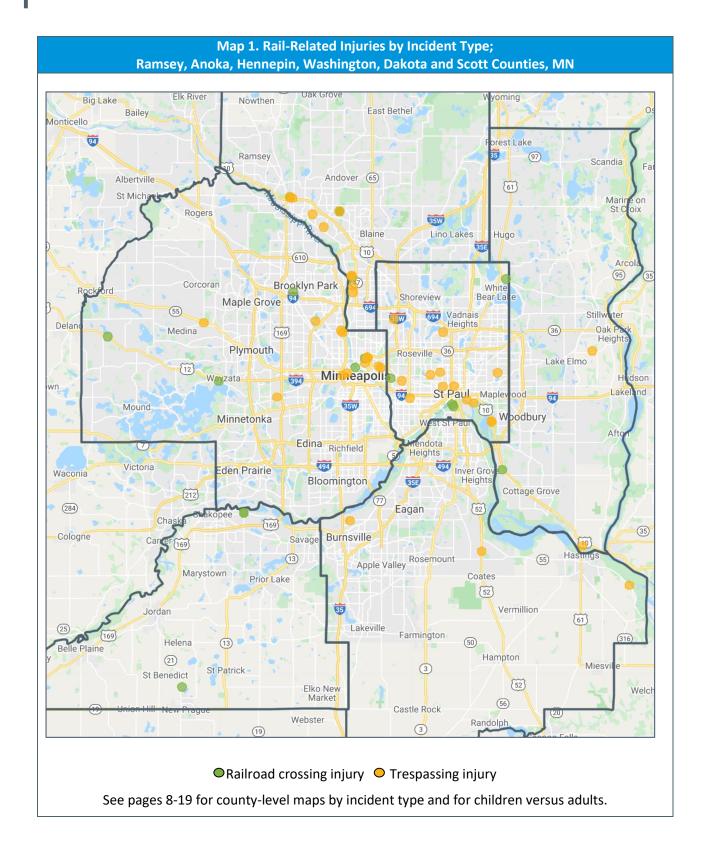
### **Summary**

- There were 68 rail-related injuries in Minneapolis—Saint Paul from 2011 to 2020, a third of which occurred in Ramsey County.
- Of those who were injured, 1 in 4 were children ages 19 and under and 1 in 4 were between the ages of 20 and 29 years old.
- Rail-related injuries were more often the results of trespassing incidents, which were more often fatal than railroad crossing injuries.
- More than 9 in 10 injuries involved on-track equipment, most of which were freight trains.
- Trespassing injuries predominated during warmer months (Jun-Nov), while railroad crossing injuries predominated during Winter months (Dec–Feb).
- Trespassing injuries were most frequent on Friday, while railroad crossing injuries were most frequent on Saturday and Sunday.
- Overall, injuries were most frequent between 12:00 PM and 5:59 PM.
- About 8 in 10 of those injured at railroad crossings were motor vehicle occupants.
- Most of those injured at railroad crossings either had gone through or around the gates or failed to stop for the train.
- Of the 7 in 10 trespassers who were struck by on-track equipment, nearly half were on the tracks when they were struck.





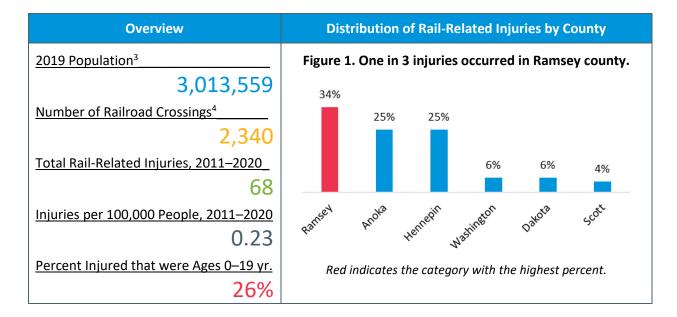












### **Overall Injuries**

Figure 2. On average, there were 7 injuries per year in the decade from 2011 to 2020. For that period, 2011 and 2018 had the highest number of injuries.

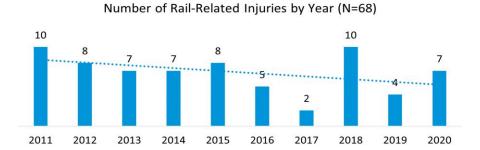
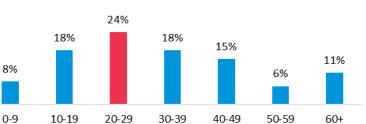


Figure 3. Of those who were injured, 1 in 4 were children ages 19 and under and 1 in 4 were between the ages of 20 and 29 years old.\*



Rail-Related Injuries by 10-Year Age Groups (N=66)

Red indicates the category with the highest percent.

\*Age data missing for 2 cases. | Total percent does not equal 100 due to rounding.





Figure 4. Trespassing incidents accounted for 6 in 10 injuries, while railroad crossing incidents accounted for 4 in 10 injuries. Trespassing injuries were more often fatal than were railroad crossing injuries.

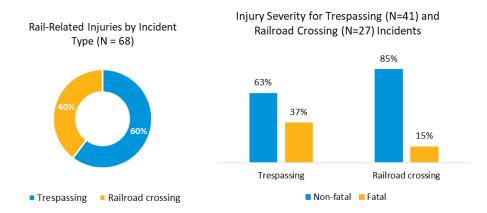
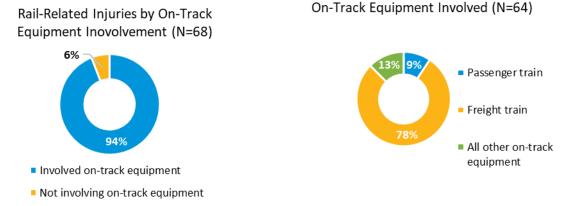


Figure 5. More than 9 in 10 injuries involved on-track equipment,\* most of which were freight trains.

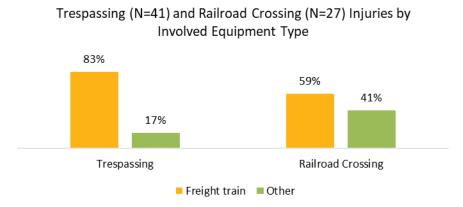


<sup>\*</sup> On-track equipment includes freight cars and trains, passenger trains and cars, locomotives, inspection vehicles, maintenance of way equipment and other on-track equipment.





Figure 6. Freight trains were involved in 8 in 10 trespassing injuries and 6 in 10 railroad crossing injuries.\*



<sup>\*</sup> Other includes on-track and not on-track equipment. On-track equipment includes freight cars and trains, passenger trains and cars, locomotives, inspection vehicles, maintenance of way equipment and other on-track equipment.

Figure 7. Trespassing injuries most frequently occurred in the warmer months from summer through fall, while injuries at railroad crossings most frequently occurred during winter months.

Rail-Related Injuries by Season and Incident Type (N=68)

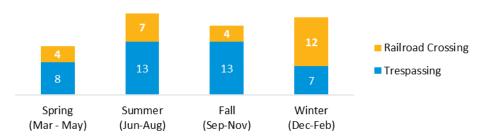
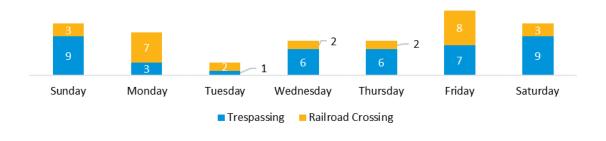


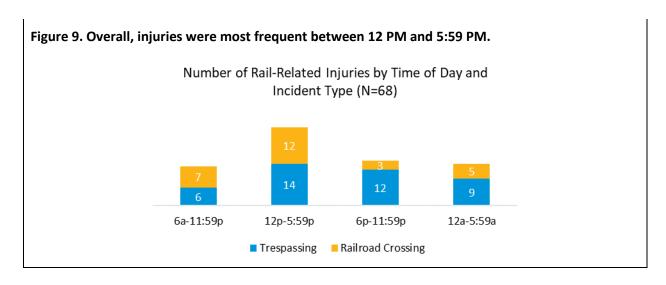
Figure 8. Trespassing injuries were most frequent on Friday, while railroad crossing injuries were most frequent on Saturday and Sunday.

Number of Rail-Related Injuries by Weekday and Incident Type (N=68)



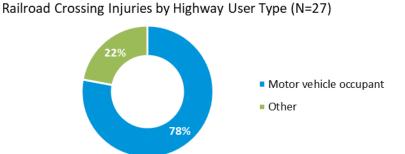






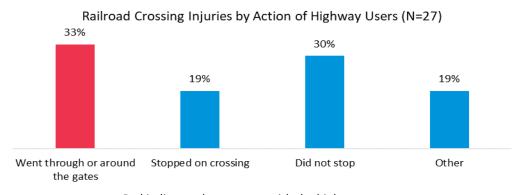
### **Railroad Crossing Circumstances**

Figure 10. About 8 in 10 of those injured at railroad crossings were motor vehicle occupants.\*



<sup>\*</sup> Other includes pedestrian and other unspecified highway users.

Figure 11. Most of those injured in railroad crossing incidents were either going through or around the gates or failed to stop for the train when injured.\*

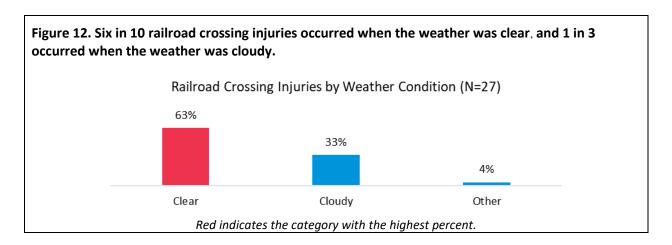


Red indicates the category with the highest percent.

\*Total percent does not equal 100 due to rounding

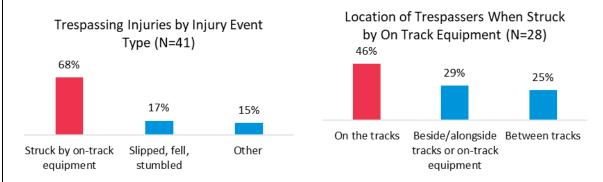






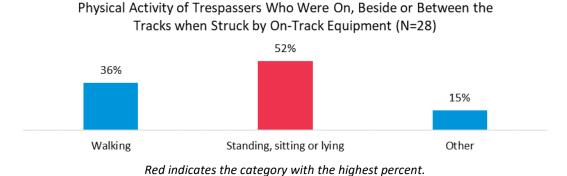
### **Trespassing Circumstances**

Figure 13. About 7 in 10 trespassers who were injured had been struck by on-track equipment. Of those, nearly half were on the tracks at the time of impact.



Red indicates the categories with the highest percents.

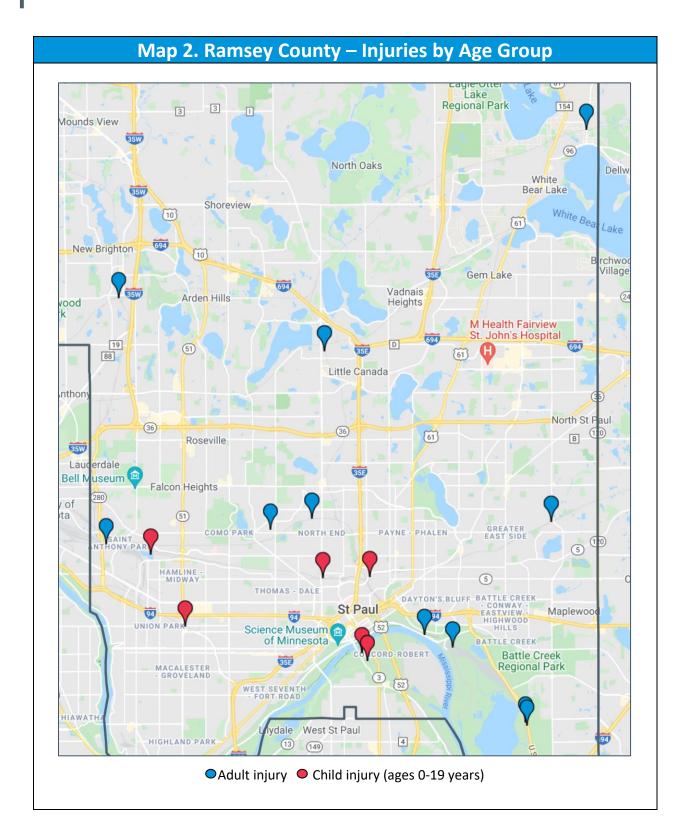
Figure 14. Of trespassers who were struck by on-track equipment, half were either standing, sitting or lying on or near the tracks at the time of impact.\*



\*Total percent does not equal 100 due to rounding



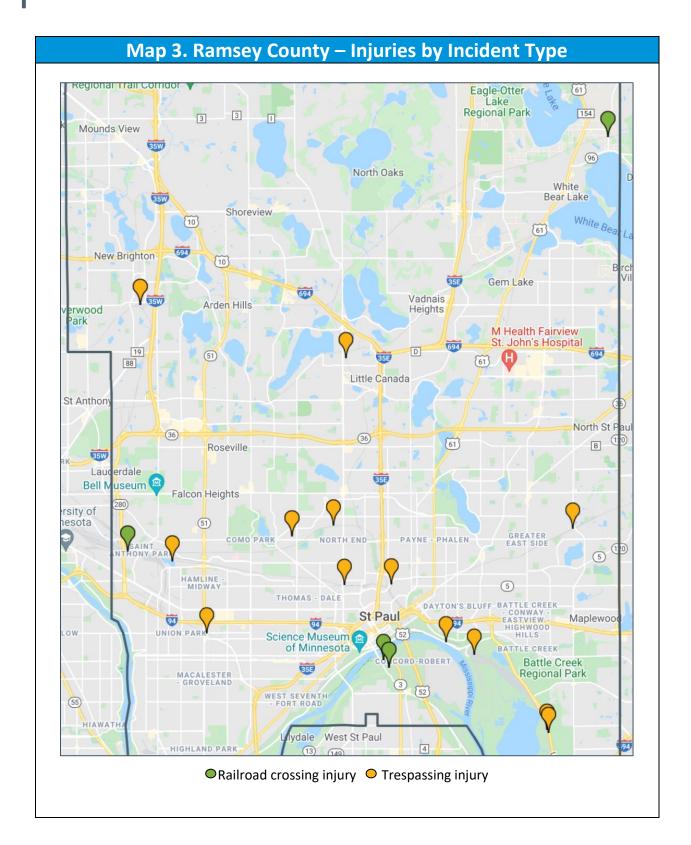








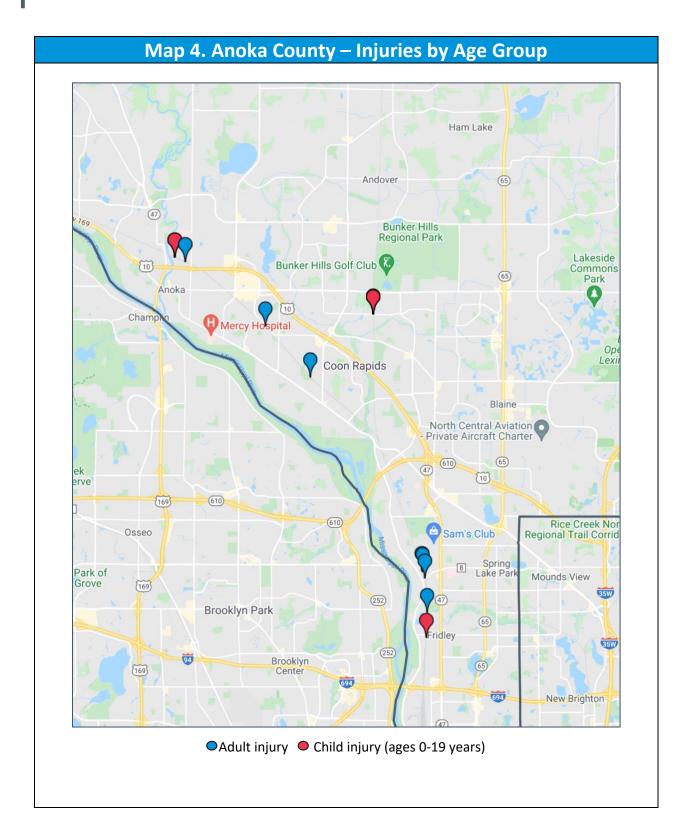
















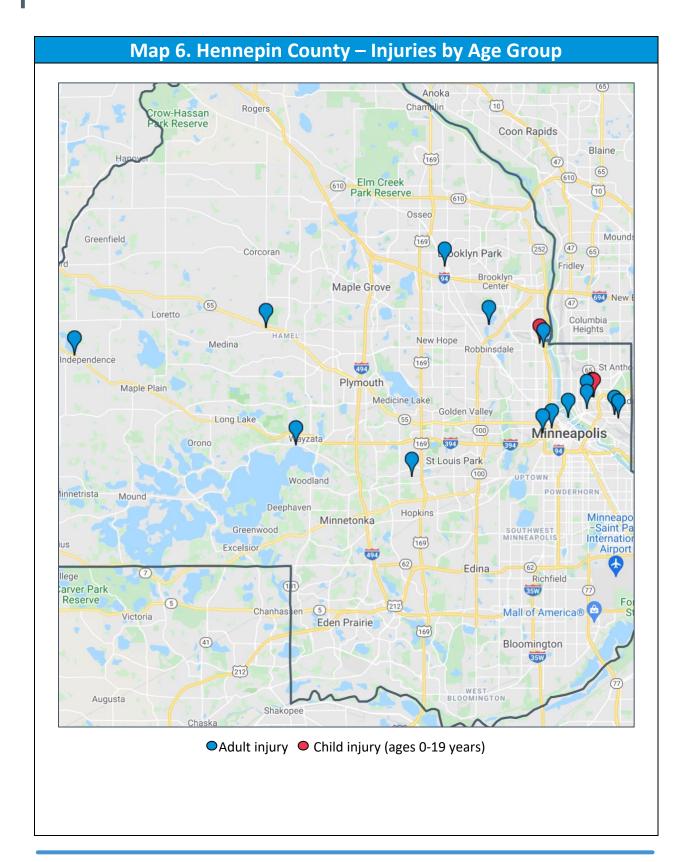


# Map 5. Anoka County – Injuries by Incident Type msey Ham Lake Andover (65) 47) Bunker Hills Regional Park [10] Bunker Hills Golf Club (65) Anoka Champ Coon Rapids Blaine North Central Aviation Private Aircraft Charter (65) Elm Creek (10) Park Reserve 610 (169) 81 Rice ( Regional Ti (610) Osseo Sam's Club Spring Lake Park Central Park of Mounds V Maple Grove (169) Brooklyn Park 94 65) Fridley 494 Brooklyn Center (169) rove 694 694 New Br Railroad crossing injuryTrespassing injury















#### Map 7. Hennepin County - Injuries by Incident Type 65 Anoka Rogers row-Hassan rk Reserve Coon Rapids Blaine [169] 47) (65) 610 Park Reserve Elm Creek Osseo Mour Greenfield 47 65 Corcoran oklyn Park Fridley Maple Grove (47) Loretto Columbia New Hope Medina Robbinsdale Independence [169] 494 65 St Ant Plymouth Maple Plain Medicine Lake Golden Valley Long Lake Minneapolis (169) 394 St Louis Park UPTOWN Woodland **Minnetrista** Mound Deephaven Hopkins Minnear Minnetonka -Saint i Greenwood Internat [169] ius Excelsion Airpo 62 Richfield Edina llege Carver Park Reserve Chanhas Mall of America® Victoria Eden Prairie 41 Bloomington WEST BLOOMINGTON Augusta Railroad crossing injuryTrespassing injury







### Map 8. Washington County - Injuries by Age Group 95) North Oaks White 96 Grant Bear Lake eview (61) (35) Mahtomedi Gem Lake Vadnais (244) Heights Pine Springs Oak Park Heights Little Canada Baypo Willow River State Park 61 North St Paul (36) Lake Elmo No th Hudson Sono Junction 95 Hudson Lake Elmo Park Reserve 94 Oakdale St Paul Maplewo 494 (52) Woodbury West St Paul (35) (156) endota eights South St I (149) Sunfish Lake Inver Grove Heights [10] Paul Park Cottage Grove [52] 95 (35) a Zoo Spring Lake Rosemount 61 Coates ● Adult injury ● Child injury (ages 0-19 years)







#### Map 9. Washington County - Injuries by Incident Type North Oaks White 96 Grant Bear Lake Shoreview 96 (61) Mahtomedi Stillwa Vadnais Arden Hills Heights Pine Springs Oak Park Little Canada Willow Ri 61 North St Paul State Pa (36) Roseville Lake Elmo North Hudson Sono Ju 95 Hudson Lake Elmo Park Reserve Oakdale Lakeland St Paul Maplew 494 [52] Woodbury Lake S Croix Be West St Paul 5 35E 156 Mendota Heights South St I (149) Sunfish Lake 95) Inver Grove Heights (10) Paul Park Cottage Grove [52] agan (95) (35) nnesota Zoo Spring Lake (55) Rosemount (55) 61 (3) Coates Vermillion Highlands



Railroad crossing injuryTrespassing injury





## Map 10. Dakota County – Injuries by Age Group Mendota Heights field 77 South St F (149) Sunfish Lake nerica® 😩 95) Inver Grove Heights [10] Paul Park Cottage Grove 3 Eagan 95) Minnesota Zoo nsville 35E Rosemount (55) 61 Apple Valley Vermillion Highlands 3 (52) Vermillion Lakeville Farmington (316) (50) [52] Hampton New Trier (50) Miesville 3 [52] (56) Castle Rock 20 Randolph ood 3 Cannon Falls (56) (19) Waterford ● Adult injury ● Child injury (ages 0-19 years)







# Map 11. Dakota County – Injuries by Incident Type Mendota Heights South St F 149 Sunfish Lake merica® 🙆 ewport 95) Inver Grove (10) Heights ton Paul Park Cottage Grove Eagan 95) Minnesota Zoo nsville 35E (55) (61) Apple Valley Coates Vermillion Highlands 3 [52] Vermillion Lakeville Farmington (316) (50) 52 Hampton New Trier (50) (61) Miesville 52 Castle Rock Randolph Cannon Falls (19) (56) 19 Waterford Railroad crossing injuryTrespassing injury







# **Map 12. Scott County – Injuries by Age Group** Carver Park 35W Reserve (5) (212) Chanhassen Mall of America® Victoria Eden Prairie 41) Bloomington WEST BLOOMINGTON Augusta hakopee Chaska [169] [169] Dahlgren Burnsville Savage [169] 35E Murphy-Hanrehan Park Reserve Marystown Prior Lake Minnesota Jordan Valley State Recreation Area [169] Helena St Patrick St Benedict Cedar Lake Elko New Market Webster Hazelwood Veseli 19 Heidelberg Lonsdale Little Chicago 19 ● Adult injury ● Child injury (ages 0-19 years)







# **Map 13. Scott County – Injuries by Incident Type** Reserve (5) (212) Chanhassen Mall of Am Victoria Eden Prairie (169) 41) Bloomingto 35W Augusta hakopee Chaska [169] [169] 35W Dahlgren Burns [169] Murphy-Hanrehan Park Reserve Marystown Prior Lake Minnesota Valley State Recreation 35 Jordan Area 169 Helena le Plaine 21) 35 St Patrick St Benedict Cedar Lake Elko New Market Webster Hazelwo (19) Heidelberg 13) Little Chicago Lonsdale Wheatland Railroad crossing injuryTrespassing injury







#### **Notes**

#### **Data source**

Data on rail-related injuries presented in this profile were obtained from the Federal Railroad Administration's (FRA) Safety Railroad Casualties (form 6180.55A) and Highway Rail Accidents (form 6180.57) databases for years 2011–2020. Excluded were rail workers and rail passengers as well as cases of suicide or attempted suicide. Maps reflect locations of injuries where longitude and latitude data are provided in each case file.

#### References

- 1. Federal Railroad Association. Fact Sheet Highway Rail Crossing & Trespassing. 2016. Available from: https://railroads.dot.gov/sites/fra.dot.gov/files/2019-10/rrx-fact-sheet-final12716.pdf. Accessed August 26, 2021.
- 2. Federal Railroad Association. Accident Data as Reported by Railroads 2009-2018. Available from: https://safetydata. fra.dot.gov/OfficeofSafety/publicsite/on\_the\_fly\_download.aspx. Accessed August 26, 2021.
- 3. U.S. Census Bureau. Quick Facts. Available from: https://www.census.gov/quickfacts. Accessed August 26, 2021.
- 4. Current Crossing Data for State of Minnesota. 2021. Available from: https://safetydata.fra.dot.gov/OfficeofSafety/publicsite/DownloadCrossingInventoryData.aspx. Accessed August 31, 2021.

This profile and other rail safety resources can be downloaded via the **Safe Kids Rail Safety Station** at <a href="https://www.safekids.org/RailSafetyStation">https://www.safekids.org/RailSafetyStation</a>.

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