

TRAUMA CARE WISCONSIN

Wayne Street MSN RN
Trauma Program Manager
Mayo Clinic Health System Eau Claire

Disclosure

- ▣ Mayo Clinic Employee
- ▣ Contractor for the WI State review process

Back in the Day

Table 122
Fatalities and Fatality Rates by State, 1975-2000 (Continued)

State	Fatalities						Fatality Rate per 100 Million Vehicle Miles Traveled					
	1975	1985	1990	1995	2000	Difference, 1975-2000	1975	1985	1990	1995	2000	Difference, 1975-2000
NJ	1,043	964	886	774	731	-30%	2.2	1.8	1.5	1.3	1.1	-50%
NM	555	535	499	485	430	-23%	5.6	4.0	3.1	2.3	1.9	-66%
NY	2,366	2,006	2,217	1,679	1,458	-38%	3.6	2.2	2.1	1.5	1.1	-69%
NC	1,506	1,482	1,385	1,448	1,472	-2%	4.1	3.0	2.2	1.9	1.6	-61%
ND	167	90	112	74	86	-49%	3.7	1.6	1.9	1.1	1.2	-68%
OH	1,766	1,646	1,638	1,360	1,351	-23%	2.8	2.2	1.8	1.3	1.3	-54%
OK	757	744	641	669	652	-14%	3.3	2.4	1.9	1.7	1.5	-55%
OR	562	559	579	574	451	-20%	3.5	2.6	2.2	1.9	1.3	-63%
PA	2,078	1,771	1,646	1,480	1,520	-27%	3.3	2.3	1.9	1.6	1.5	-55%
RI	110	109	84	69	80	-27%	1.9	1.9	1.1	1.0	1.0	-47%
SC	820	951	979	881	1,065	+30%	4.0	3.6	2.8	2.3	2.3	-43%
SD	195	130	153	158	173	-11%	3.8	2.1	2.2	2.1	2.1	-45%
TN	1,126	1,101	1,177	1,259	1,306	+16%	3.4	3.0	2.5	2.2	2.0	-41%
TX	3,372	3,678	3,250	3,183	3,769	+12%	4.0	2.6	2.1	1.8	1.7	-58%
UT	272	303	272	325	373	+37%	3.4	2.5	1.9	1.7	1.7	-50%
VT	143	115	90	106	79	-45%	4.3	2.5	1.5	1.7	1.2	-72%
VA	993	976	1,079	900	930	-6%	2.9	2.0	1.8	1.3	1.2	-59%
WA	758	744	825	653	632	-17%	3.2	2.2	1.8	1.3	1.2	-63%
WV	461	420	481	376	410	-11%	4.4	3.3	3.1	2.2	2.1	-52%
WI	930	744	769	745	799	-14%	3.3	2.0	1.7	1.4	1.4	-58%
WY	210	152	125	170	152	-28%	5.4	2.8	2.1	2.4	1.9	-65%
USA	44,525	43,825	44,599	41,817	41,821	-6%	3.4	2.5	2.1	1.7	1.5	-56%
PR	496	600	473	595	566	+14%	7.3	5.7	3.7	3.8	3.2	-56%

Sources: Fatalities—Fatality Analysis Reporting System (FARS). Vehicle Miles Traveled—Federal Highway Administration.

Traffic Safety Facts 2000

Table 122
Fatalities and Fatality Rates by State, 1975-2000

State	Fatalities						Fatality Rate per 100 Million Vehicle Miles Traveled					
	1975	1985	1990	1995	2000	Difference, 1975-2000	1975	1985	1990	1995	2000	Difference, 1975-2000
AL	902	882	1,121	1,114	995	+10%	3.6	2.5	2.6	2.2	1.8	-50%
AK	112	127	98	87	103	-8%	4.4	3.2	2.5	2.1	2.2	-50%
AZ	670	893	869	1,035	1,036	+55%	4.2	4.1	2.5	2.6	2.1	-50%
AR	559	534	604	631	652	+17%	4.0	3.1	2.9	2.4	2.2	-45%
CA	4,092	4,960	5,192	4,192	3,753	-8%	3.1	2.4	2.0	1.5	1.2	-61%
CO	581	579	544	645	681	+17%	3.5	2.2	2.0	1.8	1.6	-54%
CT	389	448	385	317	342	-12%	2.1	2.0	1.5	1.1	1.1	-48%
DE	122	104	138	121	123	+1%	3.4	1.9	2.1	1.6	1.5	-56%
DC	70	60	48	58	49	-30%	2.3	1.9	1.4	1.7	1.4	-39%
FL	1,998	2,832	2,891	2,805	2,999	+50%	3.2	3.2	2.6	2.2	2.0	-38%
GA	1,360	1,361	1,562	1,488	1,541	+13%	3.5	2.5	2.2	1.7	1.5	-57%
HI	144	126	177	130	131	-9%	3.5	1.9	2.2	1.6	1.5	-57%
ID	281	255	244	262	276	-2%	4.8	3.3	2.5	2.1	2.0	-58%
IL	2,041	1,534	1,589	1,586	1,418	-31%	3.6	2.2	1.9	1.7	1.4	-61%
IN	1,128	974	1,049	960	875	-22%	3.0	2.4	2.0	1.5	1.2	-60%
IA	670	474	465	527	445	-34%	3.8	2.3	2.0	2.0	1.5	-61%
KS	509	486	444	442	461	-9%	3.3	2.5	1.9	1.8	1.6	-52%
KY	863	712	849	849	820	-5%	3.5	2.5	2.5	2.1	1.8	-49%
LA	934	931	959	894	937	+0%	4.6	2.8	2.5	2.3	2.3	-50%
ME	223	206	213	187	169	-24%	3.1	2.2	1.8	1.5	1.2	-61%
MD	670	729	707	671	588	-12%	2.7	2.2	1.7	1.5	1.2	-56%
MA	864	742	605	444	433	-50%	2.7	1.9	1.3	0.9	0.8	-70%
MI	1,779	1,545	1,571	1,530	1,382	-22%	3.1	2.3	1.9	1.8	1.4	-55%
MN	754	608	566	597	625	-17%	2.9	1.9	1.5	1.4	1.2	-59%
MS	546	662	750	868	949	+74%	3.8	3.5	3.1	2.9	2.7	-29%
MO	1,045	931	1,097	1,109	1,157	+11%	3.4	2.4	2.2	1.9	1.7	-50%
MT	291	223	212	215	237	-19%	5.1	3.0	2.5	2.3	2.4	-53%
NE	369	237	262	254	276	-25%	3.3	2.0	1.9	1.6	1.5	-55%
NV	218	259	343	313	323	+48%	4.7	3.4	3.4	2.2	1.8	-62%
NH	151	191	158	118	126	-17%	2.9	2.5	1.6	1.1	1.0	-66%

National



Figure 1. Evolution of the Resources Manuals 1976–2022

Putting the Pieces Together: A National Effort to Complete the U.S. Trauma System

The 75th Ranger Regiment, part of the U.S. Army Special Operations Command, exemplifies how a commitment to the principles of a learning system can significantly reduce and even eliminate deaths from potentially survivable wounds.

Rangers were provided with the knowledge, training, and equipment to render immediate care, and there were coordinated evacuation sequences and patient handoffs across the trauma care continuum. The regiment also developed a Ranger Casualty Card and prehospital trauma registry to capture patient data that can be difficult to collect, providing the continuous feedback necessary for performance improvement throughout the unit.⁴

The result was an unprecedented reduction in preventable deaths and the greatest survival record in the history of war.⁵ From 2001 to 2010, the 75th achieved markedly better outcomes than the Department of Defense overall. In fact, while the entire U.S. military population faced a preventable death rate of up to 25 percent, the 75th Ranger Regiment documented only one potentially survivable fatality in the hospital setting and no preventable deaths in the prehospital setting.⁶

Up to 20 percent of civilian trauma deaths occur in patients with potentially survivable injuries.⁷

If these injured patients had access to optimal trauma care, the lives of nearly 30,000 Americans might have been saved in 2014 alone.

The 75th Ranger Regiment demonstrates that zero preventable deaths is an achievable goal when leadership takes ownership of trauma care and data are used for continuous reflection and improvement.

/ One Nation, One System

Advances in trauma care provided to service members during the conflicts in Iraq and Afghanistan have led to remarkable achievements in medicine, resulting in more lives saved on the battlefield

Search Input

- ☐ Fatality
 ☐ Injury (A)
 ☐ Injury (B)
 ☐ Injury (C)
 ☐ Property Damage

Select the form below to filter the crash map based on high level crash attributes. Click Apply to apply your filters or Reset to go back to the default settings.

There were **691** total crashes reported resulting in **771** fatalities and **651** injuries. Of this total, **691** crashes are mapped. [\[More\]](#)

Apply Reset

Counties ?

ALL

Center Map

Date Range ?

Begin Year/Month: 2001 JAN
 End Year/Month: 2001 DEC

Crash Severity ?

- ☒ (K) Fatality
☐ (A) Suspected Serious Injury
☐ (B) Suspected Minor Injury
☐ (C) Possible Injury
☐ (O) No Apparent Injury

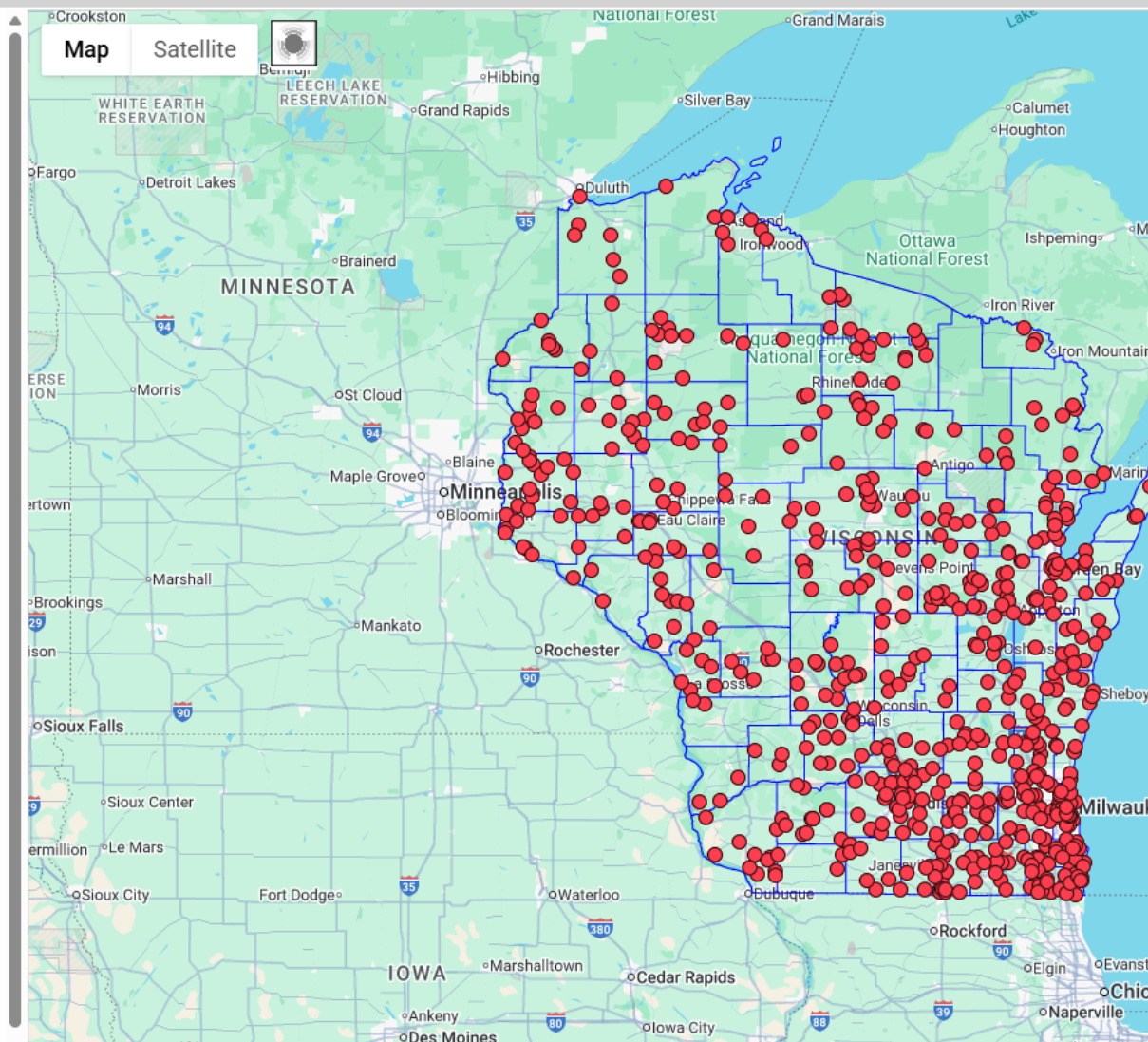
Clear Selection

Crash Flags ? [\[Definitions\]](#)

- | | |
|--|--------------------------------------|
| ☐ Bike | ☐ Pedestrian |
| ☐ Distracted | ☐ Speed |
| ☐ Impaired | ☐ Teen Driver |
| ☐ Motorcycle | ☐ 65+ Driver |
| ☐ Occp Protection | ☐ Work Zone |

Combine crash flags using: ☐ AND ☒ OR

Deer Flag ?



Wisconsin

Original enactment: [Wisconsin Legislature: 1997 Wisconsin Act 154](#) was introduced by Representatives Johnsrud, Robson, Hasenohrl, Wasserman, Urban, Huber, Lazich, R. Young, Sykora, Freese, Ott, Brandemuehl, Wieckert and Plouff; cosponsored by Senators Schultz, Rosenzweig and Risser. ([1997 Assembly Bill 638](#)).

Statute granted authority for administrative code DHS 118 to be created. The in 588B Registrar from 12/31/2004 the first DHS FHS 118 was inserted ([Inserted Chapters](#)).

**WISCONSIN STATE LEGISLATURE**

Search in Department of Health Services:

HOMESENATEASSEMBLYCOMMITTEESSERVICE AGENCIESDOCSOPTIONSHELP

Menu » Administrative Rules Related » Administrative Code » Department of Health Services (DHS) » Chs. DHS 110-199; Health » Chapter DHS 118

Chapter DHS 118

TRAUMA CARE

Subchapter I — General Provisions

DHS 118.01 Authority and purpose.

DHS 118.02 Applicability.

DHS 118.03 Definitions.

Subchapter II — Statewide Organization for Trauma Care

DHS 118.04 Lead agency.

DHS 118.05 Statewide trauma advisory council.

DHS 118.06 Regional trauma advisory councils.

DHS 118.07 EMS services.

DHS 118.08 Hospitals.

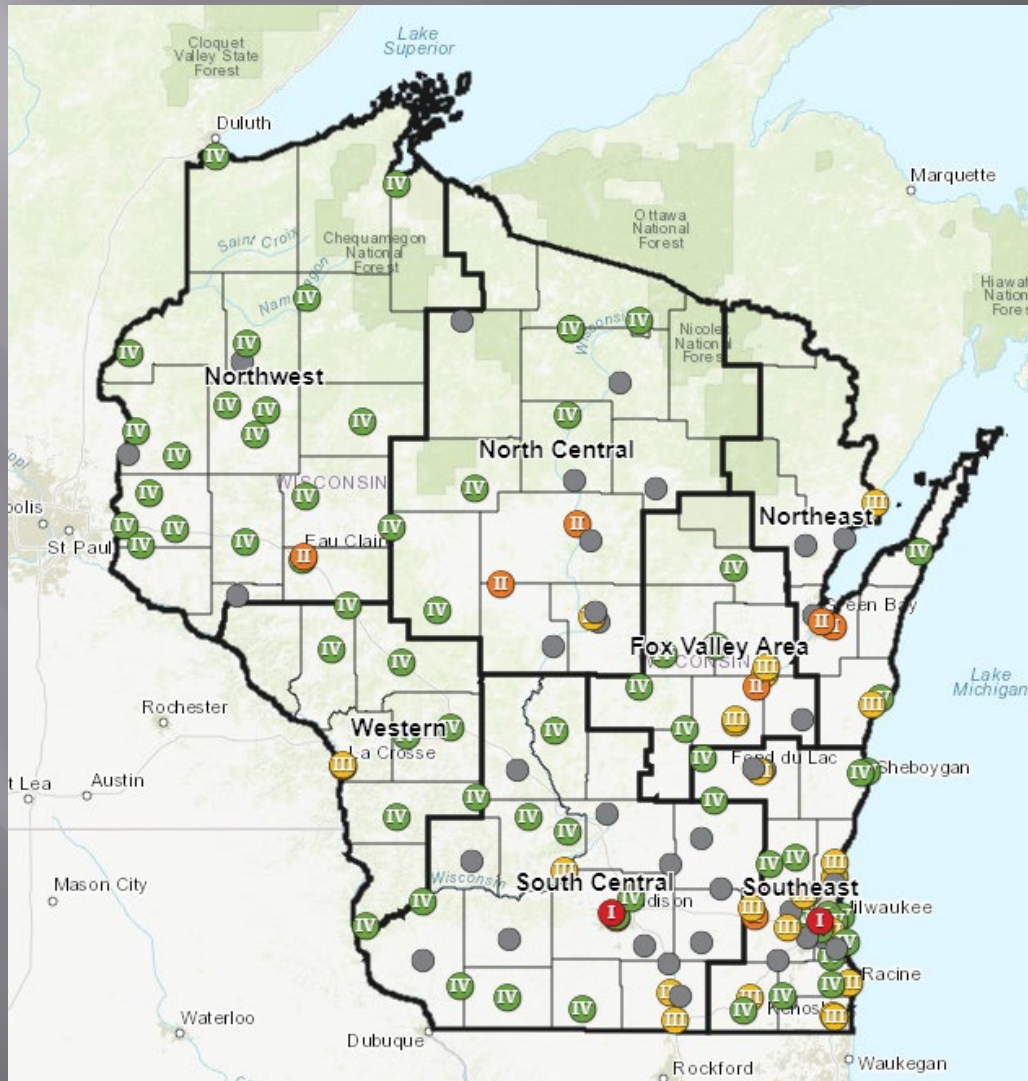
Subchapter III — Trauma Care Improvement

DHS 118.09 Trauma registry.

DHS 118.10 Performance improvement.

Note: Chapter HFS 118 was renumbered chapter DHS 118 under s. 13.92 (4) (b) 1., Stats., and corrections made under s. 13.92 (4) (b) 7, Stats., Register January 2009 No. 637.

WISCONSIN HOSPITALS





Community Maps - Traffic Safety for Wisconsin

See the Community Maps [Release Notes](#) for important updates. [About Community Maps crash data.](#)

Crash Report Download Notification - Advanced Users. [View Notification.](#)

[Search](#) [Advanced](#) [Predictive Analytics](#) [Dashboard](#) [TSC Resources](#) [Training & Help](#) [Admin](#) [Contact](#) [About](#)

[Home](#) > [Community Maps](#) > [Crash](#) > [Search](#)

Search Input

☒ Fatality ☒ Injury (A) ☒ Injury (B) ☒ Injury (C)
☒ Property Damage

Select the form below to filter the crash map based on high level crash attributes. Click Apply to apply your filters or Reset to go back to the default settings.

There were **509** total crashes reported resulting in **576** fatalities and **379** injuries. Of this total, **507** crashes are mapped. [\[More\]](#)

[Apply](#) [Reset](#)

Counties ?

ALL

Center Map

Date Range ?

Begin Year/Month: 2024 JAN
End Year/Month: 2024 DEC

Crash Severity ?

- ☒ (K) Fatality
☐ (A) Suspected Serious Injury
☐ (B) Suspected Minor Injury
☐ (C) Possible Injury
☐ (O) No Apparent Injury

Clear Selection

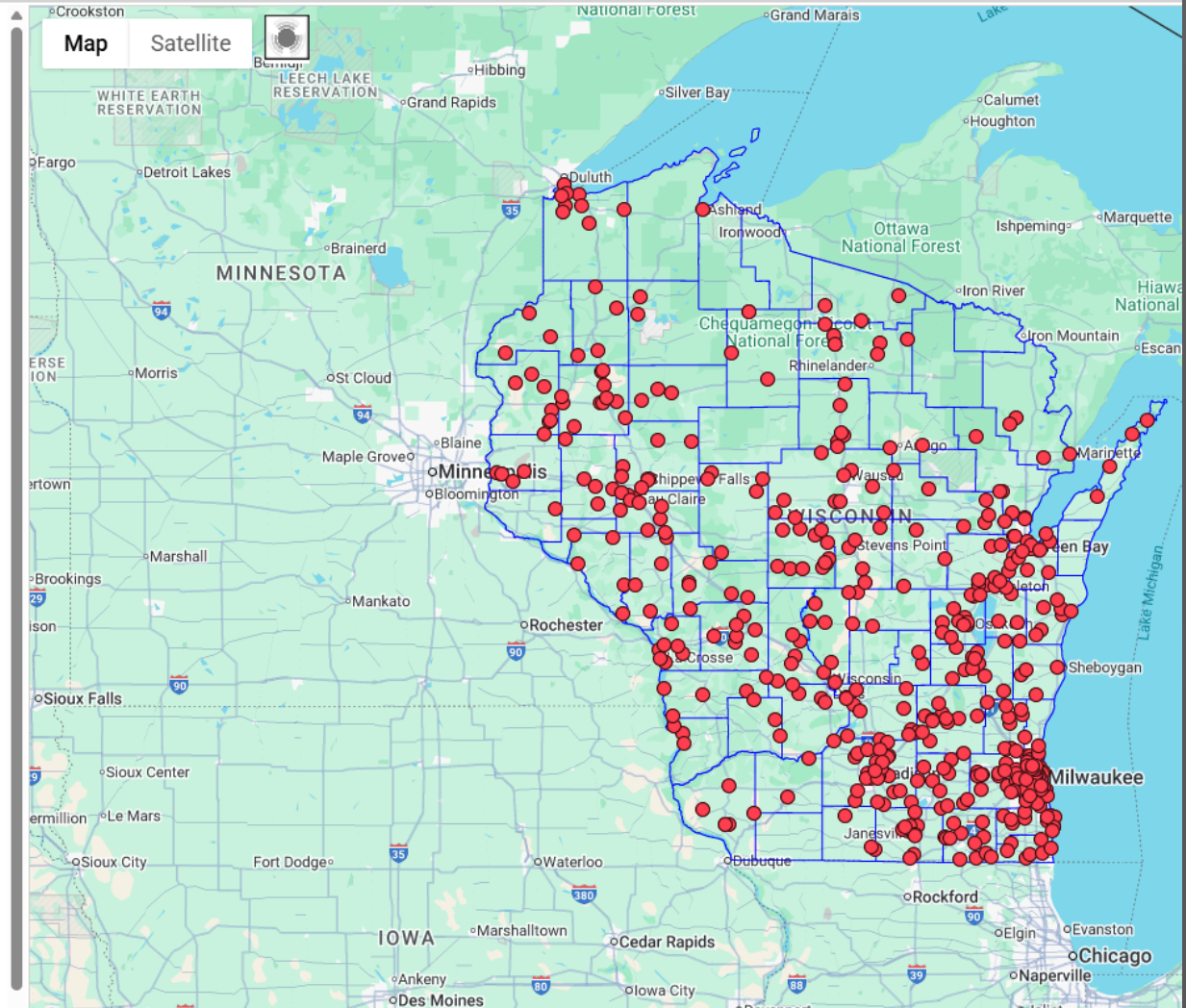
Crash Flags ? [Definitions]

- | | |
|--|--------------------------------------|
| ☐ Bike | ☐ Pedestrian |
| ☐ Distracted | ☐ Speed |
| ☐ Impaired | ☐ Teen Driver |
| ☐ Motorcycle | ☐ 65+ Driver |
| ☐ Occp Protection | ☐ Work Zone |

Combine crash flags using: ☐ AND ☒ OR

Deer Flag ?

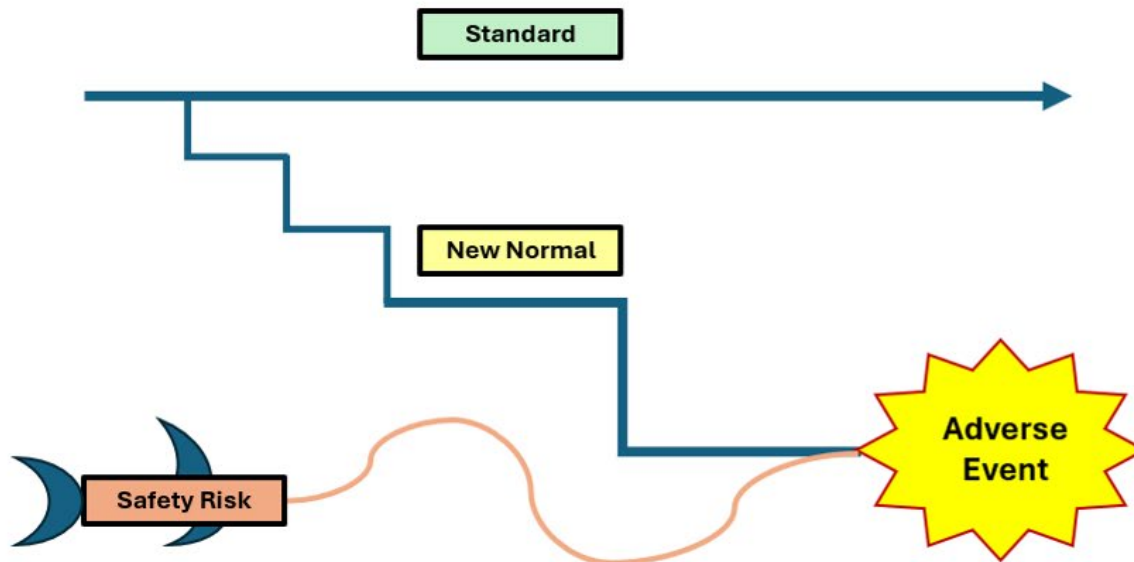
☐ Includes Deer Crashes



Wisconsin

- ▣ Ongoing Hospital site visits
- ▣ Inclusiveness of “OPT OUTS”
- ▣ Re-Open 118 for new Gray Book Criteria

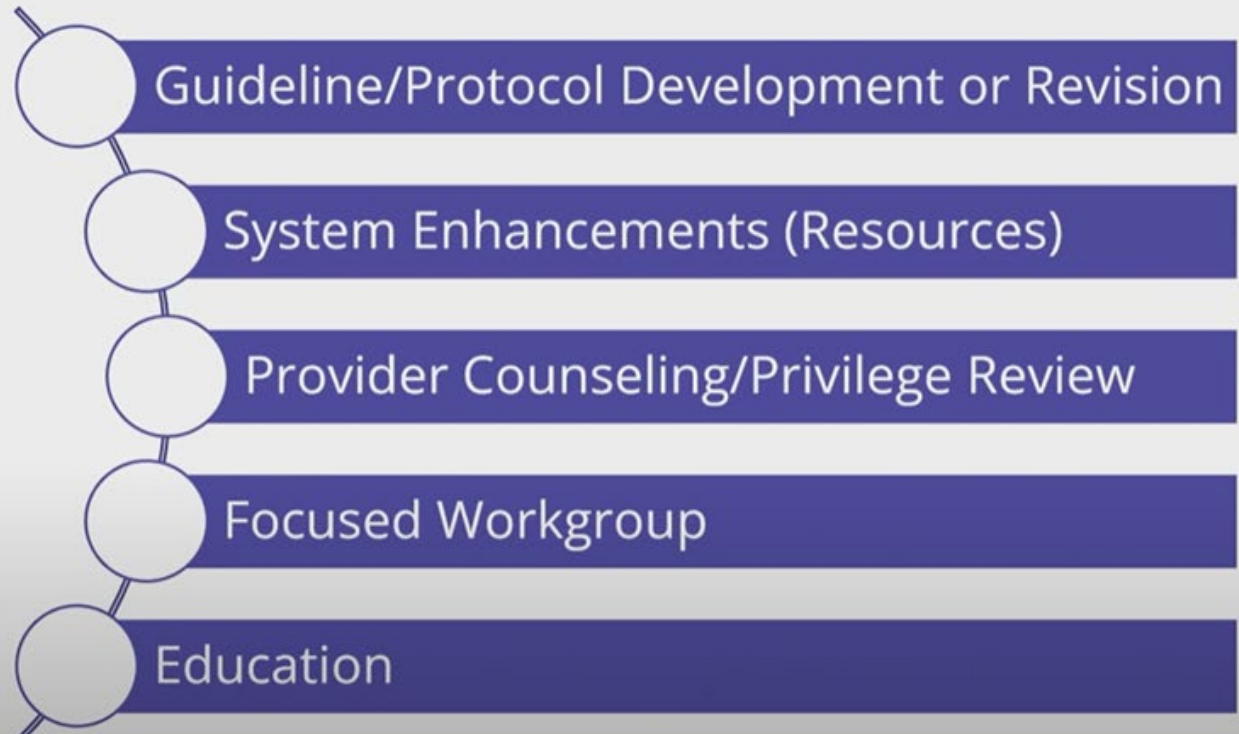
Normalization of deviance poses significant danger to safety



Key takeaways

- Deviance can have both positive and negative influences on the standards we set for our program
- The worst outcome for a negative deviance is that nothing happens, leading to normalization of the phenomenon.
- Negative deviance erodes safety margins that prime the opportunity for catastrophic failure, particularly in high-risk environments

Corrective Action



TQIP 2024

National Trend

Unrecognized hemorrhagic shock

ATLS/TNCC assessment

CXR, Pelvis and eFAST

Elderly and aspiration pneumonia

Swallow study; bedside and speech therapy

Out of bed for meals and liquids

Every aspiration event debrief

Questions?

