



Falls and Emergency Medical Services:

A Doctoral Capstone Project

Keli Zemke EMT/FF, OTS., BLS, CEIM
Joe Pfaff Fire Chief, AEMT



Goals for the project:

1. Fall prevention handout
2. Contact/Utilize community resources and advocate for our patients
3. Home and independent living evaluations done by occupational therapists
4. Age in Place
5. Save money for ems services, health care facilities, and our patients.



What we know about falls

- Most fall occur in the geriatric population
- Multiple falls occur each year
- EMS responds to falls
- Patients can refuse transport
- Falls cost departments money and resources.
- Falls are the leading cause of injury and account for 40% of hospitalizations in the geriatric population.
- Falls have become more frequent.



Population US vs WI

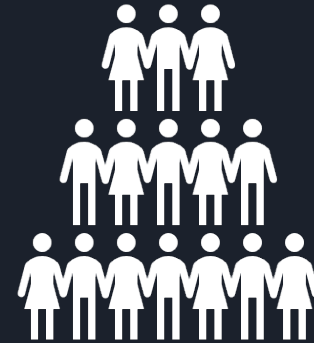


United States:

- Total population: 322.1 million (2016)
- Total number of people 65+: 49.2 million (15%)
- The geriatric population grew by 34.2% or over 13 million from 2010-2020
- “10,000 baby boomers turn 65 years of age every day between 2017-2030”

Wisconsin:

- Total population: 5,790,716 (2015-2019)
- Number of people 65+: 953,571 (16.5 %)
- Number of people 60+: 1,341,829 (23.2 %)



Local numbers



La Crosse County:

- Total population: 117,894 (2015-2019)
- Number of 65+: 18,678 (15.8%)
- Number of 60+: 25,894 (22.0%)

Vernon County:

- Total population: 30,633 (2015-2019)
- Number of 65+: 5,829 (19.0%)
- Number of 60+: 8,125 (26.5%)

Monroe County:

- Total population: 45,771 (2015-2019)
- Number of 65+: 7,537 (16.5%)
- Number of 60+: 10,716 (23.4%)



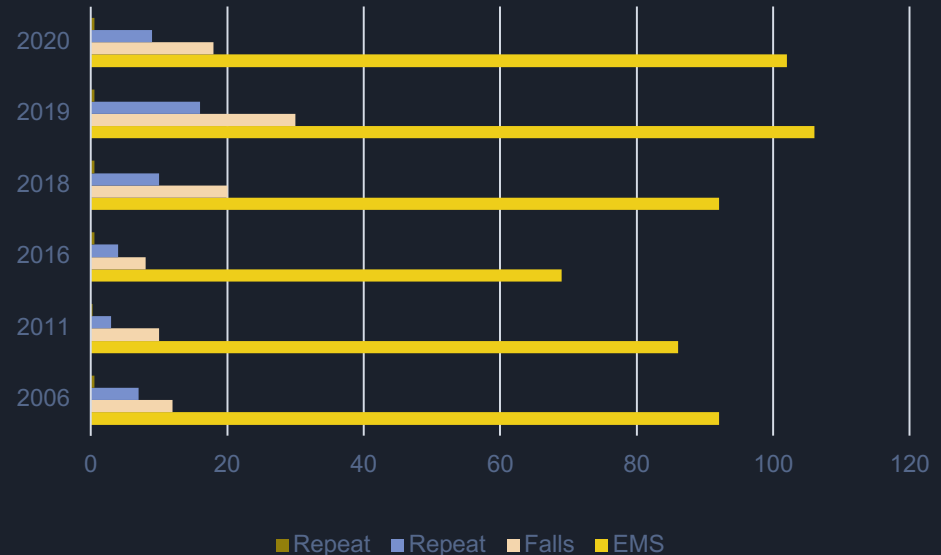


Call Volume demographics related to falls



Stoddard Bergen Fire Department:

- Year: 2006
 - Total number of calls: 124
 - EMS calls: 92 (74%)
 - Calls related to falls: 12 (13%)
 - Repeat addresses: 7 (58%)
- Year: 2011
 - Total number of calls: 141
 - EMS calls: 86 (60%)
 - Calls related to falls: 10 (12%)
 - Repeat addresses: 3 (30%)
- Year: 2016
 - Total number of calls: 115
 - EMS calls: 69 (60%)
 - Calls related to falls: 8 (12%)
 - Repeat addresses: 4 (50%)
- Year: 2020
 - Total number of calls: 148
 - EMS calls: 102 (69%)
 - Calls related to falls: 18 (18%)
 - Repeat addresses: 9 (50%)



Call Volume demographics related to falls



Sparta Ambulance Service:

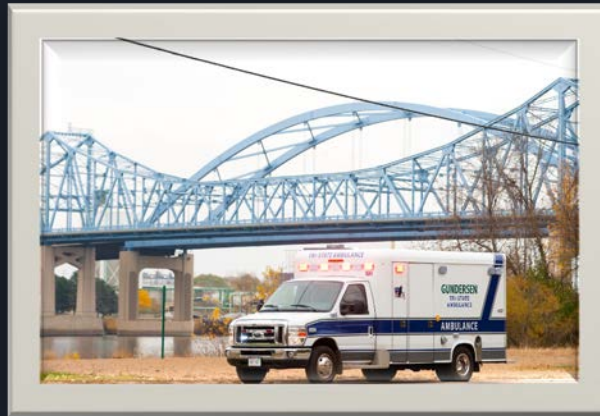
- Year: 2020
 - Total number of calls: 2425
 - Calls related to falls: 503 (21%)
 - Above 65 years old: 427 (84%)
 - Women: 48%
 - Men: 52%



Call Volume demographics related to falls



- Gundersen Tri-State Ambulance
 - 2019
 - Number of fall related calls: 2624 (19%)
 - 2020
 - Number of fall related calls: 2585 (20%)





Research

- The geriatric population is expected to double by 2060.
- 82% of people older than 85 years have abnormal gait.
- Individuals with cognitive impairments are more likely to fall.
- No current follow up for repeat fall patients.
- Falls increase with age
- Women fall more than men
- Most falls occur in the home
- Urban areas more likely to more falls, rural are more likely to transport.
- At scene intervention is beneficial
- Education is needed to prevent patients who fall more than one.



Research



- Ten years of EMS Fall Calls in a Community: An Opportunity for Injury Prevention Strategies:
 - 11.5% associated with falls.
 - Cost community \$1.5 million
 - Falls are becoming more frequent and requiring less care.
 - 50% of lift assists result in a follow up with a second call for fall within two weeks and the second call is more likely to require a trip to the hospital.
- A Descriptive Study of the Lift Assist Call:
 - 4% of calls were lift assists
 - 66.8% of these calls were to 32.5 % of the addresses
 - 563 of the return calls happened within 30 days.
 - Avg time out of service was 21.5 minutes.





What is Stoddard Bergen doing currently



- SBF is non transport agency that responds to fire and EMS calls.
- 2010 an increase in fall related calls
 - Implemented calling social services if:
 - Patient fell 2 times in 30 days or 1 month
 - Patient fell 3 times in 3 months
- Knox Boxes
 - For patients with a life alert or fall button, or patients who live alone
 - Hang on outside of building
 - Fire department has key to box
 - Inside each box there is a key or code to allow entrance into the home.
- 2017-Present (recent years) noticed another increase in fall related calls
 - Implementing a new program





What your department can do

- Distribute handouts to all fall patients 60 years and older on fall prevention
- Contact your local Aging and Disabilities Resource Center (ADRC)
 - For anyone who falls more than once that is above the age of 60 years old
 - Need signature release in order to give ADRC patient information.
- What does the ADRC offer
 - **Transportation**
 - **Nutrition**
 - **Health Promotion and prevention**
 - **Counseling**
 - **Technology classes**
 - **Dementia support**
 - **Caregiver support**
 - **Fall prevention**
 - **Home Safety**
 - **Resources related to individuals' specific needs**

Contact information:

- Vernon County- ADRC- [\(608\) 637-5201](tel:6086375201)
- Monroe County -ADRC- [\(608\) 269-8690](tel:6082698690)
- La Crosse County- ADRC- [\(608\) 785-5700](tel:6087855700)



Thank you for your time

[Handout](#)

[Information Release Form](#)

[Letter to Legislator](#)

[Legislator Information Map](#)



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