A Collaborative Approach to Improve Safety In an Amish Community
Amish in Iowa
# Geographic Distribution of Buggy Crashes

**01-Jan-15 to 06-Feb-2018**

<table>
<thead>
<tr>
<th>County</th>
<th>Number of Crashes</th>
<th>Jurisdictional System</th>
<th>Number of Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allamakee</td>
<td>1</td>
<td>Primary (State)</td>
<td>9</td>
</tr>
<tr>
<td>Buchanan</td>
<td>3</td>
<td>Farm-To-Market</td>
<td>16</td>
</tr>
<tr>
<td>Clayton</td>
<td>1</td>
<td>Other County Roads</td>
<td>3</td>
</tr>
<tr>
<td>Davis</td>
<td>8</td>
<td>Total</td>
<td>28</td>
</tr>
<tr>
<td>Decatur</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnson</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lee</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lucas</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mitchell</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Buren</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wayne</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
<td></td>
<td></td>
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</tbody>
</table>
Amish Culture

• The Amish are simply a church community who practice plain living.
• They are bi-lingual with the primary language of Pennsylvania Deitsh and English is a second language.
• They have a strong relationship with God and live by the Ordnung.
• There are many differences between settlements and even church districts within each settlement.
Cultural Concerns/Barriers

• Different expectations/rules between church districts.
• Primary Language is Pennsylvania Deitsh.
• Eighth grade education
• No modern technology
• A significant amount of time is needed to build relationships.
Amish History in Buchanan County

- The first Amish families moved from Kalona, IA to Buchanan County in the Fall of 1914.
- The settlement started with a cattle drive from Johnson County to Buchanan County by approximately 6-7 men.
- Currently there are close to 200 Amish families, 7 Churches, and 12 schools.
- The Buchanan County group are Old Order Amish

Source: Amish Communities of Iowa and Minnesota 2015
BCPH & Amish

Community Health Needs Assessment Targets

- **Promote Healthy Behaviors**
  - Healthy Lifestyles & Behaviors at All Ages
  - Substance Abuse

- **Prevent Injury**
  - Unintentional injuries

- **Protect Against Environmental Hazards**
  - Well testing
  - Septic Inspections

- **Prevent Epidemics & the Spread of Disease**
  - Immunizations
  - Communicable Disease

- **Prepare for, Respond to, & Recover from Public Health Emergencies**
  - Partner with Emergency Management

- **Health Infrastructure**
  - Liaison with local care providers
  - Liaison with I-Smile Program
BCSO & Amish

- Buchanan County Sheriff’s Office has taught pedestrian safety and stranger danger to Amish children through different partnerships.
- Heightened traffic enforcement initiatives have been completed along roadways going through Amish Community.

- Law enforcement within the Amish Community has been challenging and met with resistance.
  - Underage alcohol parties
  - Some introduction of controlled substances
  - Noise complaints/assaults
Underage Parties

Numerous underage drinking parties are reported each year, especially during the warmer-weather months.

- Almost weekly occurrence.
- Will have 30-40+ youth attending these parties, and generally are in timber/wooded areas.
- Will be inside empty houses during colder-weather times.
- Agencies have teamed up to combat the issue.
- Results in numerous charges:
  - Possession of Alcohol Under Legal Age
  - Possession of Tobacco Products/Controlled Substances
  - Trespassing
  - Criminal Mischief
  - Interference with Official Acts
  - Contributing to Delinquency of Minors
  - Littering
Motor Vehicle Accidents

• Numerous motor vehicle accidents each year along roadway that go through the Amish Community, specifically along Fairbank-Amish Blvd (W13) as well as 120th Street (C57).

• Many do not involve Amish, but the possibility of Amish involvement exists.

• The following are just a handful of examples…
October 02, 2015 – 12:20 pm        Fairbank-Amish Blvd & 120th Street
And many others…
## Fairbank-Amish Blvd Crash History

January 2007 – July 2017

<table>
<thead>
<tr>
<th>Severity level</th>
<th>Number of Crashes</th>
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<tbody>
<tr>
<td>Fatal</td>
<td>1</td>
</tr>
<tr>
<td>Major Injury</td>
<td>6</td>
</tr>
<tr>
<td>Minor Injury</td>
<td>9</td>
</tr>
<tr>
<td>Possible Injury</td>
<td>8</td>
</tr>
<tr>
<td>Property Damage</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
</tr>
</tbody>
</table>

Data credit: Iowa DOT ICAT/SAVER
HAZLETON, IA

A week ago today 4 of Eddie Helmuths’ children were hit by a pickup when their pony turned to drive in the school lane. They were waiting on traffic from behind when their pony turned when the first vehicle went by, stopping right in front of the next one, and didn’t do it to go on. They had a 2-seated pony buggy with Lisa, 12, and Rose Mary, 6, on the back seat. They were thrown from 30 to 45 feet on the pavement. Lisa had a serious skull fracture and brain injury, also a crushed pelvis. Rose Mary had a skull fracture and blood on the brain. The boys, Harley, 10, and David, 8, just kind of fell out, but both also had blood on the brain.

They and Rose Mary were taken by ambulance to Iowa City University Hospital, and Lisa was life-flighted from a Waterloo hospital also to Iowa City. She was on life support the first 3 to 4 days. Rose Mary was also very critical a few days, having surgery 2 times to take blood off her brain. David had to have surgery once.

Lisa had to have a surgery to fix a spot in her throat where they had poked the ventilator tube through her flesh. They had used an adult tube instead of a child’s. I guess everyone makes mistakes, and this was a costly one.

We heard they are all home again, but Lisa, and she was hoping to be discharged today. Their school picnic was to be today. Lisa will be laid up for awhile with her broken pelvis through her summer vacation. But all is well that ends well. God has the healing power.

We received the news of a little granddaughter, Lucy, arriving at Edwin and Mary Stutzman’s and family in Seymour, so yes, the miles are too far between us for a peek today. Other grands are Jerry and Emma Stutzman.

A daughter Ruth to David and Co.
Stopping Distance

Typical stopping distances for an average family car

**Formula**

Thinking distance + Braking distance = Stopping distance
Speed vs. Slow Moving Vehicles
Methods of Transportation
## IA Code, Section 321

**lighting equipment for animal-drawn vehicles**

<table>
<thead>
<tr>
<th>Item</th>
<th>Current Buchanan County Practice</th>
<th>Iowa Code</th>
<th>ASABE EP576.2</th>
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<tbody>
<tr>
<td>Headlamps</td>
<td>1 or 2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Tail Lamps</td>
<td>1 or 2</td>
<td>ambiguous</td>
<td>2</td>
</tr>
<tr>
<td>Flashing Amber Warning Lamps</td>
<td>none</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Flashing Amber Strobe Light</td>
<td>none</td>
<td>1 for farm wagons operated on-road</td>
<td>none</td>
</tr>
<tr>
<td>Turn Signals</td>
<td>none</td>
<td>none</td>
<td>2</td>
</tr>
<tr>
<td>Brake Lights</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Reflectors</td>
<td>none</td>
<td>none</td>
<td>2 Front 2 Back</td>
</tr>
<tr>
<td>Reflective Tape</td>
<td>perimeter tape visible only at night</td>
<td>none</td>
<td>several locations</td>
</tr>
<tr>
<td>SMV Emblem</td>
<td>1</td>
<td>1</td>
<td>1</td>
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</table>
Safe System Approach

Vehicles

Roads & Roadsides

Road Users

Speeds
RSA Suggestions

- Speed control
- Cross Section & Roadside
- Intersection & Access Design
- Signing
- Educational & Vehicular
Fairbank Amish Boulevard (W13) Corridor
175th Street to IA 281

- 7.6 Miles
- 740 to 1160 AADT (2013)
- 55 mph speed limit
- Mostly flat and straight
- 11 foot lanes
- 6 to 8 foot paved shoulders
- Farms, schools, businesses
- Automobiles
- Grain trucks
- Motorized ag equipment
- Horse-drawn buggies
- Horse-drawn wagons
- Pony carts
- Pedestrians
Terrain

County Hwy C57 Intersection

Telephone Kiosk
Roads & Roadsides

- Indirect left turns at T intersections/driveways
- “Buggy lane” (shoulder) delineation
- School & business signage
- Traffic signage
- 120th Street (C57) intersection
Bump Out
Vehicles

- Buchanan County Amish currently do not equip their buggies with turn signals, brake lights, or rear view mirrors.
- Consider upgrading lighting to meet or exceed ASABE voluntary standard.
- Consider structural changes to provide rollover protection.


- Portable speed feedback displays implemented.
- Advisory speed limit signs installed near schools.
- Off-highway business directory pull-outs under consideration.
- Traffic calming?
Road User Behavior & PPE

✓ Health & Safety Day
✓ Educational Video
✗ Equestrian Helmets
✗ Pedestrian Safety Vests

Road Users

Buchanan County, IA
Lancaster County, PA
Immediately Implemented Suggestions

- Posting of 55mph Speed limit signs
- Suggested School Speeds
- Speed Feedback Sign
- Health & Safety Day
- Bump Out
Short-term Goals

• Improve Buggy lighting/visibility
• Improve visibility of pedestrians
• Meet with business owners and implement Tourist Oriented Destination signs
• Video on how to pass a buggy
• Continue with annual Amish Health & Safety event
Long-term Goals

- Edge line rumble stripes
- Six inch wide pavement markings
- Tourist Kiosks/Gateway treatments
- Solar powered programmable school speed zone signs
- Relocation of Amish phone booths away from intersections
- Improvements to the intersection of FAB & 120th Street (moving of driveways)
References


Karlan Keim Family (2015). *Amish Communities of Iowa and Minnesota 2015*.

Buchanan County Sheriff’s Office (Crash Reports)
Contact Information

- Tai Burkhart, MPH, BSN, RN; Buchanan County Public Health Department; 319-332-0860; tburkhart@co.buchanan.ia.us; 1413 1st Street West, Independence, IA 50644

- John W. Shaw, MUP PE (WI); Institute for Transportation Researcher at Iowa State University; 414-698-7912; jwshaw@iastate.edu; 2711 S. Loop Drive, Suite 4700 | Ames, Iowa 50010-8664

- Deputy Cory Hartmann, Buchanan County Sheriff’s Office; 319-334-2568; chartmann@co.buchanan.ia.us; 210 5th Ave NE, Independence, IA 50644
Thank you!