

Safely through the Gate: Exploring Media Coverage and Journalists Decisions on the Flow of Farm Safety Stories

Rebecca Swenson
University of Minnesota

Brandon Roiger
University of Minnesota

Alexis Murillo
University of Minnesota

Follow this and additional works at: <http://newprairiepress.org/jac>

 Part of the [Agricultural Education Commons](#), and the [Mass Communication Commons](#)

Recommended Citation

Swenson, Rebecca; Roiger, Brandon; and Murillo, Alexis (2018) "Safely through the Gate: Exploring Media Coverage and Journalists Decisions on the Flow of Farm Safety Stories," *Journal of Applied Communications*: Vol. 102: Iss. 2. <https://doi.org/10.4148/1051-0834.1840>

This Research is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in Journal of Applied Communications by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.

Safely through the Gate: Exploring Media Coverage and Journalists Decisions on the Flow of Farm Safety Stories

Abstract

Agriculture continues to rank as one of the most dangerous industries in the nation. Media coverage is an important tool for sharing farm safety information, improving knowledge and changing behaviors. Despite this importance, surprisingly little research has focused on agricultural media coverage and the forces that influence journalists' decisions about when and how to cover safety stories. This study uses content analysis methods to examine the nature of farm safety issues, accidents, and topics that appear in mainstream news, agricultural media, and blogs. Researchers also interviewed journalists and bloggers to better understand their motivations, barriers, and information needs when covering safety topics. Findings indicate there is a need to expand safety reporting beyond accident coverage and to better engage bloggers in farm safety topics. Journalists emphasized their strong moral obligation to cover farm safety and desire to include more preventative information and actionable advice in stories. They also described their struggle to find local angles other than accident reports and to find timely hooks for farm safety features outside of harvest and planting seasons. Journalists wanted more research-based studies, stories, and relationships with organizational experts connected to safety and health issues. Few bloggers were engaged with farm safety topics, as some preferred to focus on more consumer-oriented information or felt they did not know enough about farm safety to write about it. Recommendations are included for journalists and organizations working on farm safety related topics and campaigns.

Keywords

Farm Safety, Agricultural Communication, News, Journalism, Blogs

Creative Commons License



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Cover Page Footnote/Acknowledgements

The authors would like to acknowledge the Upper Midwest Agricultural Safety and Health Center (UMASH) for the pilot grant that funded this research.

Safely through the Gate: Exploring Media Coverage and Journalists Decisions on the Flow of Farm Safety Stories

The agricultural industry is home to some of the most dangerous jobs in the world. The National Safety Council states the agricultural industry has one of the highest death rates, with 21.7 fatalities per 100,000 workers in 2013, which is higher than the transportation, mining, or construction industries (National Safety Council, 2015). Fatal and nonfatal injuries can include lung disease, hearing loss, skin disease, cancers associated with chemical use or sun exposure, machinery accidents, exposure to extreme weather conditions, toxic substances such as pesticides or parasitic diseases, and livestock injuries. Farmers risk their lives every day, as do people who come into contact with the agriculture industry, including farm families.

Changing established behaviors, especially in an industry in which decision-making is multifaceted, can be a complex communication task. The mass media, and efforts to improve information shared by journalists on those channels is one way to increase public knowledge and change behaviors connected to health and safety (Noar, 2006). Journalists' coverage of topics helps safety issues stay in front of the public, become a priority with key policy decision-makers, and remain salient with industry workers (McCombs & Shaw, 1972; Malone, Boyd, & Bero, 2000; Baker & Irani, 2014; Edgar, Johnson, & Estes, 2017; Leal, Rumble, & Lamm, 2015). It is important to understand what farm safety issues the media covers and how journalists cover them, for the resulting stories drive public awareness and attention. It is also important to understand how potential news topics are filtered and selected by journalists, in order to better understand forces that support the flow of news.

Gatekeeping theory is the overall process by which topics flow from source to journalist to editor, and how news stories are selected, created, halted, and promoted (White, 1950; Shoemaker & Vos, 2009). There are various levels of influence that shape news into its final form: individual, media routine, organizational, social institutional, and social system; these levels exert positive or negative force (to function like gates) as information gets pushed through or held back in the news construction process (Shoemaker, Eichholz, Kim, & Wrigley, 2001; Vos, 2015).

It is important to apply gatekeeping theory to farm safety research, for surprisingly little scholarship has focused on what farm safety topics appear in the news and the forces that facilitate or constrain the process. This research set out to contribute to an important gap in knowledge, as identified by Evans and Heiberger (2016). There is an urgent need for “content analyses that provide insights about the amount and nature of safety coverage in agricultural media in the United States” and a “need to gain better understanding of how agricultural reporters, editors, and publishers perceive farm safety and the coverage appropriate for it” (Evans & Heiberger, 2016, p. 99). The purpose of this study is to examine how farm safety appears in agricultural media, blogs, and mainstream media sources, and to better understand journalist motivations for covering farm safety topics and their information preferences and needs. Researchers first conducted a content analysis of current farm safety media coverage to examine what topics appear in mainstream and agricultural news channels and to identify individual journalists who have written multiple articles about farm safety within the timeframe studied. Researchers then conducted in-depth phone interviews with journalists who wrote at least two farm safety news stories within the sample to better understand what influences promote and constrain their coverage of farm safety news. The study's mixed method approach helped researchers examine what media coverage of farm safety exists and what factors influence its construction.

Literature Review

Media as a Source of Safety Information

Digital technology and media convergence have altered journalism, including content developed by the agricultural media. Digital platforms, including blogs, websites, YouTube and social media channels, are becoming increasingly important tools for sharing information and interacting with all publics. Shrinking news space, created by the consolidation of media ownership and increasingly sparse media budgets, has greatly impacted specialty beats like environmental and agricultural news (Friedman, 2015).

This is an important concern for the agricultural industry, as the media are an important source of risk information for producers (Chiu, Cheyney, Ramirez, & Gerr, 2015). Risk literature has established that the media stories increase the “availability” of risk information and images for public audiences (Tversky & Kahneman, 1974; McComas, 2006), and along with interpersonal communication, journalists can amplify risk and safety information (Verbeke, Viaene, & Guiot, 1999; Southwell & Yzer, 2007). Neuwirth, Dunwoody, and Griffin (2000) found that risk information in news media encouraged individuals to seek additional information and take protective actions. This is important research for farm safety issues, as commercial agricultural media serves as a large informal program of continuing education for those working in the agricultural industry (Evans & Heiberger, 2016). Media and blogosphere agendas also shape policy agendas, and in turn, impact production operations, daily life on the farm, and the long-term success of producers (Baker & Irani, 2014). It is crucial to understand how changes in the media landscape and how decisions made within the newsroom impact coverage of topics like farm safety.

Farm Safety in the Media

Evans and Heiberger (2016) conducted an extensive literature review focusing on commercial agricultural media and the farm safety agenda and found surprisingly little research on farm safety coverage in the United States (Evans & Heiberger, 2016). However, a handful of international studies have examined topics addressed in safety reporting (Evans & Heiberger, 2016). For example, Shea and Chapman (2001) found that the Australian paper *The Land* focused mainly on injuries related to mechanical equipment and chemicals; similarly, Lundälrv (2006) found that the *Land Lantbruk* newspaper in Sweden mostly focused on injury reporting connected to tractor and motor vehicle accidents. This research suggests there is a need for additional content analysis to better understand the nature of farm safety reporting within the United States.

Journalistic Motivations for Covering Farm Safety

To better understand potential opportunities for increasing media coverage of farm safety and health, research must also explore journalistic motivations and barriers when writing about risk-related topics. Agricultural journalists are aware of the importance of farm safety topics, as other researchers found editors included farm safety as one of four major themes of risk communication, and they reported addressing it on a regular basis (Abrams & Meyers, 2010). Agricultural journalists have also described their motivation to include preventative information in stories. For example, Abrams and Meyers (2010) found editors wanted to describe risks, in proportion to their impact on readers' lives, and to share actionable information, advice, and solutions (Abrams & Meyers, 2010). Mainstream editors report a similar motivation to publish stories that directly impact readers' lives. Cartmell, Dyer, Birkenholz and Sitton's (2003) survey of Arkansas mainstream (non-agricultural) newspaper editors found that reader interest, accuracy, timeliness,

and trustworthiness were some of the most important factors influencing the decision to print, or not print, agricultural news.

It is important to further explore how these motivations for telling stories that impact readers' lives and desire to share actionable information might translate specifically to farm safety reporting. The mass media has the power to affect safety factors and their salience to the general public, and there is a need for more specific research on coverage of farm safety in mainstream media, agricultural media and bloggers in the United States.

Purpose and Research Objectives

Researchers sought to understand how farm safety appeared in the media and the motivations, barriers, and needs of journalists when covering farm safety in their publications. The following research questions guided this study: (a) How does farm safety appear in media channels, including in agricultural media, blogs, and mainstream media sources?; (b) What are the motivations and barriers for journalists and bloggers when covering farm safety topics?; and (c) What are their information preferences and needs?

Methods

Researchers used content analysis and phone interviews to gather data for this mixed-methods study. This research design allowed researchers to gather quantitative data about the amount, frequency, and nature of farm safety media coverage, and then to gather more targeted, in-depth qualitative data from journalists creating those news stories to probe their decision-making process, motivations, and information needs. Both types of data worked together to provide a deeper understanding of factors that promote or impede the construction of farm safety news.

The content analysis examined what farm safety topics appear in media channels. Content analysis provides a systematic process to identify trends and patterns in media coverage (Riffe, Lacy, & Fico, 2014). The content analysis was designed to examine how farm safety was covered within different media organizations and to identify potential gaps in coverage. To create a comprehensive sample, articles were gathered from mainstream media, agricultural media and bloggers using the following search terms on LexisNexis and Google News: stockmanship OR farm safety OR farm accident OR farm death OR farm injury OR farm training, and sources were limited to those published in 2015. In addition, the same search terms and limitations were manually entered into the individual search engines of agricultural bloggers. After determining the relevancy of topic, the final sample resulted in over 200 articles. A codebook was developed to assess the type of media organization, the focus of the report, publishing date, who was quoted in the articles, and what solutions were presented for improving farm safety. Two coders were trained to use the codebook, and then they coded a random sample (10 percent) of articles to determine intercoder reliability. A score of 0.8 was obtained using Cohen's Kappa, which demonstrates strong agreement between coders. Once an agreement was achieved, coders analyzed the remaining sample of articles.

As part of the content analysis, researchers identified journalists and bloggers within the sample who had written at least two articles about farm safety within the time period studied. These journalists became the targeted group for in-depth phone interviews, the second stage of research. Out of 51 journalists who had written multiple farm safety articles within the sample, researchers were able to identify and gather working phone or email addresses for 37 contacts. Following the procedures described by Dillman, Smyth, and Christian (2014), researchers contacted journalists

with multiple invitations to participate, and when available, across different modes of communication. Out of the list of 37 journalists, 5 journalists declined to participate, and 12 were unreachable after several outreach attempts. In all, researchers were able to successfully complete 20 phone interviews with journalists who had written multiple farm safety articles within the sample. Media organizations interviewed included large mainstream newspapers, small regional newspapers, agricultural focused publications, and bloggers. Each interview lasted approximately 45 minutes and was recorded and transcribed. The interview questions were open-ended, built upon insights from the content analysis, and specifically probed decision-making and preferred resources for different types of farm safety stories. Researchers focused on the background of journalists and their interest, motivations, challenges, barriers, and needs when writing farm safety stories and presenting solutions to farm safety issues. An expert panel of faculty, students, and media professionals provided feedback on the phone interview questions and the interview guide. Interview transcripts were analyzed for common trends within responses using open coding (Strauss & Corbin, 1998). Researchers independently coded the qualitative data for commonalities and initial categories, then together discussed themes and patterns in multiple sessions of data review. After initial categories were narrowed and refined, researchers again reviewed content to make certain themes accurately represented journalist's responses and intentions. Important insights from the content analysis and phone interviews are discussed below.

Findings

Research question one was *What are common characteristics of farm safety stories in different types of media channels, including agricultural media, bloggers, and mainstream media sources?* The results are organized in five categories.

Mainstream and Agricultural Journalists Covering Farm Safety

To investigate if farm safety coverage was coming from mainstream news organizations, agricultural media, and agricultural bloggers, the content analysis recorded the type of media organization publishing the article. Agricultural bloggers in the sample did not often post about farm safety within the given timeframe. A majority of articles in the sample (72.86%) were identified as from mainstream media organizations followed by articles classified as agricultural media (23.82%; Table 1). Only three percent of articles were classified as blogs. The intent of this research was to gather at least 50 blogs, but researchers were unable to secure this quantity. Other scholars have found blogs to be an effective tool for sharing safety information. For example, the National Institute for Occupational Safety and Health (NIOSH) Science Blog was an effective source for distributing workplace safety and health information, according to Sublet, Spring, and Howard (2011), which suggests that additional research is warranted on potential barriers to increasing agricultural bloggers coverage of farm safety topics.

Strong Focus on Accident Reporting

To explore the range of farm safety topics that were covered by the media within our sample, the focus or overall topic of each article was recorded. Accidents were covered more than any other type of story. The focus of the report was a media response to an incident in 43 percent of articles. Prevention, education or opinion was the focus of 27 percent of articles, and feature stories were the focus of 16 percent of articles (Table 2). The remaining articles focused on organizational news or profiles, events, or lawsuits. Nearly all of the articles that reported an accident also reported a death. Most of these stories were found in mainstream media sources rather than in

agricultural media or blogs. Of the articles that reported a specific accident, 13 percent were from agricultural media, two percent were from bloggers, and 85 percent were from mainstream media sources.

Table 1

Type of Media Source For Each Article

Source	Frequency	Percentage
Mainstream media	153	72.86
Agricultural media	50	23.81
Blogs	7	3.33
Total	210	100.00

Table 2

Focus of the Report for Each Article

Focus	Frequency	Percentage
Response to incident or theme	91	43.33
Prevention, education	57	27.14
Feature story	33	15.71
Event	17	8.11
Organization	5	2.38
Lawsuit	2	0.95
Other	5	2.38
Total	210	100.00

Use of Expert Information and Sources

To better understand the information needs and sources used by journalists covering farm safety topics, affiliations of those quoted directly within articles were analyzed. Organizations and their employees were most likely to be quoted in the articles (32%). Farmers were quoted in 11 percent of articles, university and governmental experts were quoted in six percent of articles, and nine percent of articles had quotes from other community members. A high number of articles within the sample (42%) did not contain any quotes at all. Agricultural and mainstream media sources used similar sources.

Farmers are more likely to be quoted when an accident is reported, compared to when an accident is not reported. In 71 percent of the articles that quoted a farmer, an accident was reported. Within these accident reports, the farmer quote was often used to offer cautionary advice or describe actions or attitudes that led to an accident. For example, a story from *Newton Daily News* offered 13 tips to keep farmers safe during harvest season. In the article, a farmer said, “With harvest season here, we all need to remember how quickly farm accidents can occur. [...] It’s important to slow down, be alert and use extra caution out there.”

Organizational quotes were frequently used to convey the importance of agriculture, the importance of farm safety over profits, and organizational commitment to farm safety and specific programs. For example, William Nelson of the Agricultural Safety and Health Council of America (ASHCA) was quoted in an article about National Farm and Safety Week, “on behalf of our members, we thank those who work in agriculture, and pledge to promote evidence-based practices and programs to help ensure safe, sustainable agriculture in America for generations to come.”

University expert quotes often described specific steps that can be taken to improve safety on farms, the importance of farm safety, and impact of farm accidents on communities and families. For example, Robert Aherin, an agricultural safety specialist from the University of Illinois, was quoted:

“What matters most is the lives, the health, and the well-being of our families and co-workers. While it’s important to adhere to safe farm practices all year long, it’s especially important to do so during the harvest season, when we experience the highest injury and fatality rates of the year.”

Presentation of Solutions to Improve Farm Safety

Researchers were also interested in what solutions to improving farm safety were suggested in the articles. No solutions to improving farm safety or avoiding accidents were directly expressed in most articles, with 43 percent of articles not reporting any suggested solutions. Within the subset of articles that did offer some solution to improving farm safety, prevention measures (including using ventilation masks and installing tractor roll bars) were mentioned in over half of the articles that suggested a solution. More training for farmers and farm workers was suggested as a solution in 29 percent of articles. Changing agricultural practices (from reducing the size of farms to implementing more safe animal handling techniques) was suggested as a solution in eight percent of articles. Agricultural media articles were the most likely to report a solution for improving farm safety, with only 12 articles not reporting any solution.

Concentrated Coverage During Harvest and Planting Seasons

Nearly half of the farm safety articles in the sample were published in September and October. The next highest months were April and May, with 13 percent of articles published during that time. This is a popular time of year because of planting and harvesting seasons for most major crops; however, there is a consistent threat to farm safety throughout the rest of the year. Organizations should work with journalists to increase messages outside of harvest and planting seasons so coverage is not limited to a few months of the year.

Overall, the content analysis revealed a strong focus on accident reporting, a limited range of solutions presented and experts quoted, and concentrated coverage during harvest and planting season. The trends identified in the content analysis influenced the interview guide and probing questions asked during the second stage of research. For example, after asking journalists what influences their decision to cover farm safety, researchers probed about decision-making

connected to accident coverage versus stories focused more on education or preventative measures. The qualitative results shared below from the phone interviews assist in explaining the motivations and barriers that shape farm safety media coverage.

Research questions two and three were *What are the motivations and barriers for journalists and bloggers for covering farm safety topics? What are their information preferences and needs?* The interview results are organized in ten categories. The interviews revealed journalists are driven by three main factors when writing about farm safety: a moral obligation to the farm community, a desire to increase coverage of local stories, and top-down editor pressure to cover safety. Some journalists and bloggers explained that they had no previous background knowledge about farm safety, but they were assigned to write about the topic; however, most writers chose to write about farm safety because it "hit home" for them in both a metaphoric and geographic way. These factors are discussed in-depth below.

Motivated by Moral Obligation

Journalists and bloggers reported feeling a personal connection to farmers and workers in the agricultural industry, even without a personal background in farming. As part of their journalistic commitment to the communities they cover, many described wanting to protect farmers and prevent tragic accidents. As one journalist said, "They're my farmers, they're my ranchers. I don't want them to die. They are just like family to me." In an ideal world, journalists and bloggers want their farm safety coverage to be precautionary news that prepares and educates farmers now to save their lives tomorrow. One journalist stated that farm safety "counts for one out of four occupational fatalities in this state. The numbers are going up and it is [journalists'] job to figure out why." Many respondents report being driven to cover farm safety because of a general passion for health and safety topics.

Driven to Tell Local Stories

Most journalists described the need to write local stories as a current factor driving their health and farm coverage. Any stories that involve local contacts humanize news and draws readers in because they are familiar with locations, and potentially, with individuals involved. The story becomes unique to the readers because it happened in their town. One journalist stressed that "local farm news" and anything that impacts the immediate community is important to readers and editors. When another journalist was asked to place the importance of farm safety on a five-point scale, where "one" is of no importance and "five" would be very important, she stated, "Five, if local hook." Respondents describe accident or tragedy coverage as a community service to rural communities. Local news of all types helps community members get to know one another, drives the conversation, and serves as a public record for rural communities. Successful stories that are not about accidents, and more about preventative measures, also must have similar local connections and human elements.

Pushed by Editor Pressure

Some journalists reported that they did not necessarily have a strong personal connection to farm safety topics, but they were regularly assigned to cover health and safety by editors and news directors. For many agricultural publications, health and safety was part of their regular editorial calendar and a routine beat assigned to journalists. Agricultural journalists typically wrote all types of daily stories and farm safety was one part of everyone's scope of coverage. Mainstream

publications typically had a reporter who specialized in agricultural stories or one that covered health and safety topics for a variety of industries.

Triggered by Tragedy

Despite strong moral obligations and desire to run more preventative coverage, reporting on a tragedy was the primary motivation for most stories. Journalists expressed their frustration at this, as they would like to have more preventive stories to cover, but did not feel like it would get the attention of their audience. One journalist said, "Unfortunately tragedy sells headlines and press coverage." Journalists and bloggers must follow media norms that require news to be current, perishable and continually fresh; unfortunately, tragedy or accidents provide journalists with the timely hook needed to produce coverage. As one reporter said, "Some publications do not seem to find farm safety as newsworthy information unless it is following a tragic farm accident." Without tragedy, many reporters and bloggers feel that they do not have a story that audiences would read. Another said, "[We need] something really compelling and unfortunately, that's tragedy a lot of times. You know, somebody's lost a life or they've lost their leg or there's you know, any number of things like that." Journalists report wanting to make more connections to research, preventative measures, and farm safety in general when writing about accidents, but were concerned about victim blaming if they pushed this too far. One interviewee did suggest that there could be more follow-up stories from accidents and tragedies about how local farm families were coping with injury or loss, and any changes made within the farm that improved safety, or stories about local efforts to increase visibility for farm issues.

Current literature suggests mass media tends to be more reactive than proactive, but preventative stories have more power to influence safety behaviors and outcomes (Singer & Endreny, 1994). As mentioned above, journalists are interested in increasing their coverage of preventative safety issues but struggle to find a strong "local" angle or solid connection to current topics. Health and safety organizations could share local events, data, and case studies with journalists in order to increase preventative and proactive media coverage.

Initiated by Seasonal Cycles

Outside of tragedies, harvest season was another factor that motivated coverage, which is also reflected in content analysis results above. When asked about timing for farm safety stories, many journalists talked about having to come up with an annual fall farm safety piece and how challenging it was to keep that coverage "fresh, new and interesting" for readers. Harvest season was a good time to write about farm safety for some journalists, as it is a key time to make people "think twice" about their actions. Other journalists talked about the challenge in quickly saturating audiences with farm safety info, as in one month, "there is only so much farm safety info that they can hear." Some coverage around this time is important, and journalists acknowledged that you have to meet the needs of farmers right when they need to hear proper information about safety. On the other hand, as discussed above, many journalists would like to increase coverage during other times of the year, so they do not saturate reader communities with concentrated reporting only in the fall. A few interviewees mentioned that the spring planting season drives coverage for more child-related farm safety than any other time of the year. One interviewee explained, "I cover child-related safety in particular in late-Spring/Summer since that's when more kids are helping out during summer break." Another journalist said they would like to break down specific farm safety challenges in a cycle spread out across the year, and for example, "cover kids in summer, machinery during harvest, fires in fall/spring."

Inspired by increasing need for employee training

When asked about trends or other topics that might increase the importance or breadth of farm safety news, journalists suggested that one way to increase coverage of farm safety information during non-harvest and planting seasons might be to connect stories to employee training. Journalists acknowledged that there is an increase in hired labor and strong concern about employee training among farmers. “As more producers depend upon hired labor and are carrying workman’s comp insurance, there seems to be more willingness to implement best management and training regarding safety practices for employees,” stated one journalist. In an ideal world, another journalist said she would prefer to cover farm safety topics in a preventative manner, for example, within stories about “employee training sessions.” Another journalist discussed a need to change farmer mindsets about what skill sets are important, including the need to put employee training “first and foremost” for good management practices. Journalists see this as an important story and an opportunity to advocate for farm safety.

Barriers to Farm Safety Coverage

Journalists expressed a need to improve awareness of and engagement with farm safety information and preventive techniques. Despite a desire to advocate for farm safety and to increase preventative coverage, active barriers – including perceived lack of audience attention, challenges in making farm safety habitual and every day, and the difficulty obtaining statistics, stories, and resources – were cited as roadblocks to additional farm safety coverage.

Stopped by Perceived Audience Interest

As one journalist stated, “News -- especially when staffing is thin -- is often reactionary. It’s what’s out of the ordinary, not the everyday routine.” Another journalist said, “When these tragedies strike, interest soars – as is expected. When there’s not necessarily that grim reminder, it stays in the back of [reader and editor] minds.” Another said, “Unless there has been a recent event, it is difficult to get producers to truly take it seriously. They know the importance of farm safety, but it is hard to put it at a forefront.” Bloggers were especially concerned about audience attention, as they felt their audiences cared more about food safety and consumer education. When bloggers did write about farm safety they covered it from a ‘keeping kids safe on the farm’ angle, as they felt that perspective would resonate most with readers.

Hindered by Integration with Other Narratives, Self-knowledge

Interviewees described challenges in making farm safety information part of broader agricultural topics and stories. Journalists struggle to find ways to connect farm safety with other “hot” issues of the day, so coverage becomes more routine, frequent and habitual. According to one interviewee, “Farm safety is something that should be a way of life for people involved in agriculture. Safety is something that should be habitual and a way of daily life.” Agricultural stories should reflect this and safety information should be embedded in small ways within other stories. Another said they want to write about farm safety so it becomes integrated into agricultural conversations, and safe practices become natural like “buckling your seat belt.” It was not obvious to these journalists how to create this integration. Another barrier stressed by interviewees was their own general knowledge, as they described feeling like they did not know enough about farm safety to write expert educational content on the subject. This challenge is addressed more below.

Slowed by the Availability of Statistics and Stories

To write more compelling articles about farm safety, journalists expressed a desire for more data, more studies, and more local angles for farm safety stories. They want stronger relationships with safety-related organizations so they have a specific point person to call for data. They also would like more personal stories, unrelated to tragedy, that highlight the importance of safety.

Specifically, many journalists reported a desire to receive more farm safety facts and figures for national and state trends. As one journalist said, "updated farm statistics would always be helpful. We [journalists] also don't automatically get notified about all farm accidents and fatalities." Another journalist explained the challenges in obtaining updated statistics:

"I would like both state and federal agencies that monitor workplace safety on at least once a year basis provide data summaries to show what's happening in farm safety. Give you more than this year's and last year's data. Give you more historical trends and go as far back as data's been collected. So, that we can see and glance at the things that are getting better or worse both in my state and in other states."

The journalist went on to explain a desire to have data broken down in every county for multiple years. This is valuable to journalists, because "when you notice a trend in the data, we won't have to do all that legwork ourselves. We won't be going out and collecting all of those reports ourselves." Journalists also wanted more information about how local agricultural and ranch organizations are involved in farm safety topics.

Besides more accurate statistical data, journalists want more personal first-person stories and stronger relationships with organizations that are working with farm safety and health issues. When asked about current resources, journalists cited the National Children's Center for Rural and Agricultural Health and Safety, National Institute for Occupational Safety and Health, various farm safety publications, extension services and farm organizations such as Farm Bureau and Farmers Union as common resources they consider valuable.

Journalists would like these organizations to connect with them at conferences or seminars, reach out via email and phone with journal articles or safety data, set up webinars, and conduct more in-person meetings. Specifically, any stories that describe how a local farmer has taken advantage of their resources, in a success story format, would be welcomed.

Discussion and Conclusions

Content analysis revealed a strong focus on accident reporting and a limited range of solutions and topics presented within farm safety stories. Interviews with journalistic gatekeepers revealed that the stories they wrote were driven by feelings of moral obligation, a strong commitment to rural audiences and local stories, and news values that encourage attention on impactful tragedies and unusual accidents. Research participants discussed these obligations as part of their journalistic mission, passion for agriculture, and desire to improve the community. Key messages to journalists should acknowledge these feelings of journalistic commitment and loyalty to reader communities when communicating the importance of health and safety information.

Despite these strong moral feelings, journalists expressed their frustration that due to perceived lack of audience interest, accident stories are prioritized over educational or preventative features. As interviewees mentioned, there is a missed opportunity to do follow-up stories from accidents to see if new preventative measures were implemented, additional training held, or if attention to safety issues increased within that community after an incident. There is also an opportunity for more coverage on the economic impact of safety, lawsuits and other related areas. With lawsuits

specifically, there were few articles that mentioned a lawsuit and even less that used a lawsuit as a story's focus. This is one impact area that could use more coverage to gain a better understanding of what can happen after an accident on the farm.

Content analysis findings also revealed that a large portion of stories ran during the harvest season, and in interviews, journalists confirmed that these stories were pushed by an annual focus on fall farm safety pieces. Despite this being a positive force encouraging coverage of farm safety stories, journalists discussed how challenging it was to keep coverage fresh and find timely hooks that were not based around accidents or harvest. Communication efforts should explore how to expand the coverage cycle beyond harvest and planting season, perhaps by creating themes focused on a different aspect of health and safety information each month.

Interviewees also described how the lack of connections between farm safety information and broader agricultural topics and stories hinders coverage. Journalists struggled to associate farm safety with other pressing current issues of the day, so coverage would become more routine, frequent, and habitual. One exception: journalists felt that the increase in more hired labor and need for more employee training might be a new way to connect with audience members on farm safety issues, as this is a strong concern among farmers. This suggests there is an opportunity to increase communication about employee training efforts, resources, and tie these programs to larger health and safety efforts when communicating with journalists. In general, more messages highlighting how farm safety and health connects to larger issues in the media – and align these issues with specific, local resources or perspectives where possible – might be developed by organizations communicating about farm safety.

To ease farm safety writing, journalists want more studies on farm safety (and safety data in general). They want stronger relationships with safety-related organizations so they have a point person to call for data. Journalists also expressed a desire for more accurate statistical data on all aspects related to safety. This suggests that communication with media stakeholders about recent academic studies and trends in statistical data should be increased. They also would like more non-tragedy personal stories that highlight the importance of safety. There is also an opportunity to develop specific “success stories” about producers who have implemented preventative programs that can be shared with local journalists, bloggers, and on organizational social media channels.

Research insights are helpful for journalists looking to write more frequent and diverse stories about farm safety and for organizations trying to provide useful information for farm safety topics and stories to journalists. Key findings from this research were shared with journalists who participated in the study, with communication and health professionals at an occupational safety-related conference and symposium, and with a local health and safety organization that provided a grant to fund a portion of this research. Although this research contributes to gaps in understanding of what type of farm safety coverage exists and what forces enable and prevent the flow of coverage, this research does have its limits. First, researchers struggled to include bloggers in the research sample. Future research might concentrate on how to better engage this audience and encourage them to write more farm safety stories. Second, in-depth interviews were conducted with a small sample of media professionals. Future research might continue to investigate gatekeeping behaviors within agricultural and mainstream media organizations. Getting more farm safety information safely through the media organization's gate is an important part of reducing the risk for farm families and workers.

- Abrams, K. M., & Meyers, C. A. (2010). Conversations with gatekeepers: an exploratory study of agricultural publication editors' decisions to publish risk coverage. *Journal of Applied Communications*, 94(1-2), 6-18. [doi:10.4148/1051-0834.1183](https://doi.org/10.4148/1051-0834.1183)
- Baker, L. M., & Irani, T. (2014). The impact of new media on policy affecting agriculture. *Journal of Applied Communications*, 98(3), 17-31. [doi:10.4148/1051-0834.1083](https://doi.org/10.4148/1051-0834.1083)
- Cartmell, D. D., Dyer, J., Birkenholz, R., & Sitton, S. (2003). Publishing agricultural news: A study of Arkansas daily newspaper editors. *Journal of Applied Communications*, 87(4), 7-22.
- Chiu, S., Cheyney, M., Ramirez, M., & Gerr, F. (2015). Where do agricultural producers get safety and health information? *Journal of Agromedicine*, 20(3), 265-272. [doi:10.1080/1059924X.2015.1045156](https://doi.org/10.1080/1059924X.2015.1045156)
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method*. John Wiley & Sons.
- Edgar, L., Johnson, D., & Estes S. (2017). Poultry production messaging in two national-circulation newspapers. *Journal of Applied Communications*, 101(1), 6-18. [doi:10.4148/1051-0834.1010](https://doi.org/10.4148/1051-0834.1010)
- Evans, J., & Heiberger, S. (2016). Agricultural media coverage of farm safety: Review of the literature. *Journal of Agromedicine*, 21(1), 91-105. [doi:10.1080/1059924X.2015.1106376](https://doi.org/10.1080/1059924X.2015.1106376)
- Friedman, S. (2015). Environmental journalism in the United States. In A. Hansen and R. Cox. *The Routledge handbook of environment and communication*. New York: Routledge.
- Leal, A., Rumble, J. & Lamm, A. (2015). Setting the agenda: Exploring Florida residents' perceptions of water quality and quantity issues. *Journal of Applied Communications*, 99(3), 1-15. [doi:10.4148/1051-0834.1058](https://doi.org/10.4148/1051-0834.1058)
- Lundälv, J. (2006). Farm-related injury event, social consequences, and injury reporting in the Land Lantbruk newspaper in Sweden: A retrospective study of farm-related injury reporting during 2000–2005. *Australian Journal of Rural Health*, 14(6), 249-252. [doi:10.1111/j.1440-1584.2006.00824.x](https://doi.org/10.1111/j.1440-1584.2006.00824.x)
- Malone, R., Boyd, E. & Bero, L. (2000). Science in the news: Journalists' construction of passive smoking as a social problem. *Social Studies of Science*, 30(5), 713-735. [doi:10.1177/030631200030005003](https://doi.org/10.1177/030631200030005003)
- McComas, K. A. (2006). Defining moments in risk communication research: 1996–2005. *Journal of Health Communication*, 11(1), 75-91. [doi:10.1080/10810730500461091](https://doi.org/10.1080/10810730500461091)
- McCombs, M. E. & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly* 36(2), 176-187. [doi:10.1086/267990](https://doi.org/10.1086/267990)
- National Safety Council (2015). *Injury Facts*. Retrieved from <https://www.nsc.org/membership/members-resources/injury-facts>
- Neuwirth, K., Dunwoody, S., & Griffin, R. J. (2000). Protection motivation and risk communication. *Risk Analysis*, 20(5), 721-734. [doi:10.1111/0272-4332.205065](https://doi.org/10.1111/0272-4332.205065)
- Noar, S. M. (2006). A 10-year retrospective of research in health mass media campaigns: where do we go from here? *Journal of Health Communication*, 11(1), 21-42. [doi:10.1080/10810730500461059](https://doi.org/10.1080/10810730500461059)
- Riffe, D., Lacy, S., & Fico, F. (2014). *Analyzing media messages: Using quantitative content analysis in research*. New York: Routledge.
- Shea, R., & Chapman, S. (2001). Media reports of rural health and safety: a review of articles published in The Land newspaper. *Australian Journal of Rural Health*, 9(5), 206-208. [doi:10.1111/j.1440-1584.2001.tb00422.x](https://doi.org/10.1111/j.1440-1584.2001.tb00422.x)
- Shoemaker, P. J., & Vos, T. P. (2009). *Gatekeeping theory*. New York: Routledge.

- Shoemaker, P. J., Eichholz, M., Kim, E., & Wrigley, B. (2001). Individual and routine forces in gatekeeping. *Journalism & Mass Communication Quarterly*, 78(2), 233-246. [doi:10.1177/107769900107800202](https://doi.org/10.1177/107769900107800202)
- Singer, E., & Endreny, P. (1994). *Reporting on risk: how the mass media portray accidents, diseases, disasters, and other hazards*. New York: Russell Sage Foundation. Retrieved from <https://www.russellsage.org/publications/reporting-risk>
- Southwell, B. G., & Yzer, M. C. (2007). The roles of interpersonal communication in mass media campaigns. *Annals of the International Communication Association*, 31(1), 420-462. [doi:10.1080/23808985.2007.11679072](https://doi.org/10.1080/23808985.2007.11679072)
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques*. Sage Publications.
- Sublet, V.; Spring, C., & Howard, J. (2011). Does social media improve communication? Evaluating the NIOSH science blog. National Institute for Occupational Safety and Health. *American Journal of Industrial Medicine*, 54(5), 384-394. [doi:10.1002/ajim.20921](https://doi.org/10.1002/ajim.20921)
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *science*, 185(4157), 1124-1131. [doi:10.1126/science.185.4157.1124](https://doi.org/10.1126/science.185.4157.1124)
- Verbeke, W., Viaene, J., & Guiot, O. (1999). Health communication and consumer behavior on meat in Belgium: from BSE until dioxin. *Journal of Health Communication*, 4(4), 345-357. [doi:10.1080/108107399126869](https://doi.org/10.1080/108107399126869)
- Vos, T. P. (2015). Revisiting gatekeeping theory during a time of transition. In T. Vos & Heinderyckx (Eds.), *Gatekeeping in Transition*, (pp. 3-24). New York: Routledge
- White, D. M. (1950). The "gate keeper": A case study in the selection of news. *Journalism & Mass Communication Quarterly*, 27(4), 383-390. [doi:10.1177/107769905002700403](https://doi.org/10.1177/107769905002700403)

ABOUT THE AUTHORS

Dr. Rebecca Swenson is an Assistant Professor of Agricultural, Food, and Natural Resource Communication at the University of Minnesota.

Brandon Roiger is currently a Partnership Outreach Coordinator at the University of Minnesota. He graduated with a B.S. in Agricultural Education in 2016.

Alexis Murillo is currently an undergraduate at the University of Minnesota studying Agricultural Communication & Marketing.