ALTERNATIVE STRATEGIES

Messages and information alone may not lead to behaviour change, research suggests there are alternative methods that, used in conjunction with messages, may increase the likelihood of change:

- ✓ Regular group discussions between farmers can be beneficial to reinforce a behaviour and create a sense of community. This should also include partners and family members.
- √ Workers should be supported to create a personalised safety plan (i.e. increase ownership and incorporate flexibility), according to preidentified hazards.
- ✓ Engage in interactive activities with farmers such as safety fairs, hazard hunts, and visiting agricultural shows.

- √ Consider online engagement through webinars, podcasts, blogs and animated videos.
- ✓ Recruit farmer mediators in local communities.
- √ Think about developing a voluntary program which farmers can join to be evaluated by a peer (trained farmer) in order to earn a certificate of safety or other recognition (Wilmes & Swenson, 2019).
- ✓ Develop and moderate online farm forums based on discussing safety.
- √ Consider sharing safety information via educational videos which farmers can access at any time. Videos are a suitable format for a range of educational and language backgrounds.

A NOTE ON SELF-EFFICACY

(Sewell et al., 2017)

Self-efficacy is the belief that an individual can engage in actions and behaviours successfully, this is a key element in terms of encouraging behaviour change. Enhanced self efficacy encourages individuals to make changes and increases their motivation to do so.

Farmer self-efficacy can be enhanced via:

- ✓ Discussing ideas about safety with trusted experts
- √ Sharing safety experiences with peers
- √ Witnessing peers engaging in safety actions successfully

References

- Elkind, P. D. (2008). Perceptions of risk, stressors, and locus of control influence intentions to practice safety behaviors in agriculture. Journal of agromedicine, 12(4), 7-25.
- Peters, G. Y., Ruiter, R. A., & Kok, G. (2013). Threatening communication: A critical re-analysis and a revised meta-analytic test of fear appeal theory. Health Psychology Review, 7(sup1), S8-S31.
- Sewell, A. M., Hartnett, M. K., Gray, D. I., Blair, H. T., Kemp, P. D., Kenyon, P. R., & Wood, B. A. (2017). Using educational theory and research to refine agricultural extension: affordances and barriers for farmers' learning and practice change. The Journal of Agricultural Education and Extension, 23(4), 313-333.
- Sheeran, P., Harris, P., & Epton, T. (2014). Does heightening risk appraisals change people's intentions and behavior? A meta-analysis of experimental studies. Psychological Bulletin, 140(2), 511-543.
- Sorensen, J. A., Tinc, P. J., Weil, R., & Droullard, D. (2017). Symbolic interactionism: a framework for understanding risk-taking behaviors in farm communities. Journal of Agromedicine, 22, 26-35.
- Svennefelt, C., Hunter, E., & Lundqvist, P. (2018). Evaluating the Swedish approach to motivating improved work safety conditions on farms: insights from fear appeals and the extended parallel processing model. Journal of Agromedicine, 23(4), 355-373.
- Wilmes, E., & Swenson, R. (2019). Engaging Dairy Farmers in Safety Messages: Values, Moral Norms, Barriers, and Implications for Communication. Journal of Applied Communications, 103(1), 7.
- Witte, K. (1992). Putting the fear back into fear appeals: The extended parallel process model. Communications Monographs, 59(4), 329-349.







Using research to improve THE EFFECTIVENESS OF SAFETY INTERVENTIONS in farming

Dr Amy Irwin, Letizia Caruso, Ilinca-Ruxandra Tone, Gabi Lipan



AIM OF SAFETY CAMPAIGNS

Agricultural safety campaigns usually aim to communicate information about a particular risk or hazard within farming. Ideally this will raise awareness of that particular problem and therefore change risk perception (individual calculation of the likelihood of an adverse incident occurring, and the consequence

of that incident). This in turn should alter risk management strategies through farmers implementing changes in their behaviour and / or environment, thereby improving safety.



THE PROBLEM

Despite the development of agricultural safety campaigns across the globe, farming remains a dangerous occupation associated with a high fatality and injury rate (Svennfelt, Hunter & Lundqvist, 2018). This has led researchers to question the effectiveness of safety campaigns and interventions.

Some key issues and barriers to safety campaigns have been identified:

- ✗ Messages / campaigns based on fear or guilt are not always effective. Farmers may react adversely to the message and try to avoid it (Sheeran, et al., 2014).
- ✗ If the safety message is not relatable (i.e. they cannot see how it applies to them) or too generic, farmers will disregard the message (Svennefelt, Hunter, & Lundqvist, 2018).
- ✗ Safety strategies perceived as costly, time consuming, or interfering with work processes, will be ignored (Svennfelt, Hunter & Lundqvist, 2018).

- ➤ Psychological research indicates that safety messages often improve awareness of a risk, and may lead to the intent to change behaviour, but this does not then translate into actual behaviour change (Elkind, 2008; Peters, Ruiter, & Kok, 2013; Sheeran, Harris & Epton, 2014).
- ✗ Farmers may already be aware of the threat but are either complacent about the risk, or feel they are immune, and are therefore unlikely to change their behaviours (Witte et al., 1992).
- Where perceived efficacy in response to a message is low (i.e. x is a hazard but I can't do anything about it) positive behaviour change is unlikely, and maladaptation may occur (Witte et al., 1992).
- X Taking risks may represent a part of farmers' identity of survivors which has formed under societal and financial pressures and which farmers take pride in (Sorensen et al., 2017).

Recommendations for enhancing safety messaging

Based on psychological research into risk perception, management and safety, the following strategies can be used to enhance message effectiveness:

ENHANCE SELF-EFFICACY (BELIEF THAT FARMER ACTION CAN BRING ABOUT CHANGE)

- ✓ Target specific behaviours: Messages should detail a specific risk or hazard and describe the specific action that is needed to reduce or remove that hazard.
- ✓ Increase motivation: Recommended behaviours should be feasible and costeffective to implement, with visible results.
- ✓ Encourage ownership: Support farmer responsibility for their own safety through their expertise and knowledge of their own farm and equipment.

SHARE POSITIVE MESSAGES (FEAR IS NOT ALWAYS EFFECTIVE)

✓ Good practice: Positive messages from peers on how to solve safety issues could

- enable farmers to implement those behaviours on their own farms.
- ✓ Profit and efficiency: Safe behaviours are often also more cost effective and efficient than risky behaviours and can be badged as such.

IMPROVE ACCESS (MINIMISE EFFORT)

- ✓ Education: Where further knowledge or education is required this information should be easy to access, ideally with links from the original safety message.
- ✓ **Use the media:** Messages should ideally be shared across multiple channels in different forms to enable farmers to interact with whichever format suits them best.

INCREASE ENGAGEMENT

- √ Tell a story: Engagement increases where the audience can personally identify with the individual and their circumstances.
- ✓ Interact: Allow feedback on safety communication in order to inform future campaigns based on current risk perception.