



Supporting safer and healthier farmers

TEAGASC is collaborating on research and practical initiatives to improve the health and safety of farmers, including a programme aimed at addressing farmers' cardiovascular health.

The health and safety of farmers is an issue of major national and international importance. Worldwide, farming accounts for a disproportionate number of occupational accidents (Sheehan *et al.*, 2020), and farm fatalities (Meredith, 2012). In addition to being a risky occupation it is also a relatively unhealthy one. Previous research undertaken with farmers establishes that they have a higher risk of chronic illnesses (van Doorn *et al.*, 2018) and, associated with this, of dying at an earlier age (Smyth *et al.*, 2013), than their counterparts working in other occupations. The consequences for farmers impact not only on their quality of life, but also on the viability of farm enterprises (Whelan *et al.*, 2009). These findings underpin the need to adopt a holistic view on occupational health and safety in farming built around an integrated response.

Teagasc has developed such a response through a series of research and extension initiatives that bring together key influencers of behavioural change to collaborate in research leading to practical interventions or initiatives that enhance safety or health. This article summarises this approach and the associated projects before drawing on the Farmers Have Hearts – Cardiovascular Health Programme (FHH-CHP) to provide an example of the framework in action.

Collaborating for impact

The decision to be safer or to adopt a healthier lifestyle is not made in a vacuum. In order to influence and sustain behavioural change that impacts on occupational health or safety it is necessary to understand how individuals interact with their work environment. Exploring how personal, social and professional relationships shape these interactions, we can learn much about an individual's capacity and willingness to change. Teagasc has developed this approach over the past 15 years and the current programme is anchored around the Department of Agriculture, Food and the Marine (DAFM)-funded Behaviours for Safer Farming, a project involving studies of the physical and social contexts of farmers, their attitudes and behaviours, the role of institutional frameworks, and the development of pilot interventions that seek to enhance machinery and livestock safety. Other projects include studies of

the potential of discussion groups to influence farmer safety behaviours, developing advisory support tools targeting farmer health and well-being issues, and developing healthy lifestyle support programmes that work for farmers. The latter are funded through Teagasc Walsh Scholarships involving partnerships with several academic institutions in Ireland. In each instance, practitioners, regulators or industry stakeholders, including the Health and Safety Authority, Glanbia Ireland (GI), the Irish Heart Foundation (IHF), and the Health Service Executive (HSE) are financially supporting or contributing resources, and are active partners.

The FHH-CHP

Figure 1 provides an example of how this framework is implemented within the FHH-CHP. The FHH-CHP is a large-scale health behaviour change programme that involves 868 dairy and cattle farmers. Cardiovascular disease (CVD) is the leading cause of death in Ireland, and is more prevalent among farmers than in other occupational groups (van Doorn *et al.*, 2018). The programme consists of a physical health check and survey at Week 0, three different health support options, which farmers can self-select, and a follow-up health check at Week 52. This study brings together a Teagasc Walsh Scholarship involving the National Centre for Men's Health – IT Carlow and UCD School of Agriculture and Health Sciences, and is supported by the IHF, HSE and GI. The IHF planned, supervised and implemented the health checks, the HSE funded the health coach intervention and partly funded the health checks, and GI supported the recruitment of the dairy farmers and provided additional research funding.

The results of the Week 0 health checks and Week 0 surveys are presented in **Figure 2**. Overall, 74% of farmers have four or more risk factors for CVD, which increases their chance of having a stroke or heart attack threefold compared to those with fewer risk factors. The findings emphasise the importance of supporting farmers to adopt and sustain health behaviour changes and improve their cardiovascular health. The detailed results of the health checks (**Figure 2**) highlight the need for programmes that support farmers to improve their diet, increase their levels of physical activity and enhance their well-being.

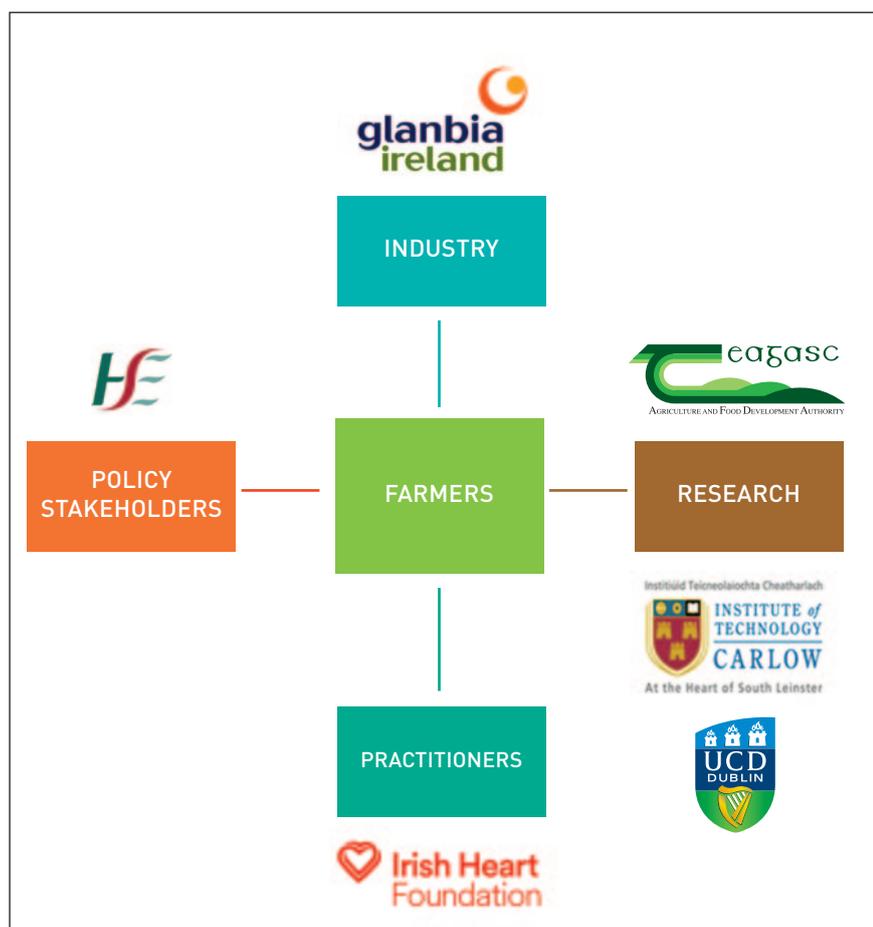


FIGURE 1: The FHH-CHP transdisciplinary structure.

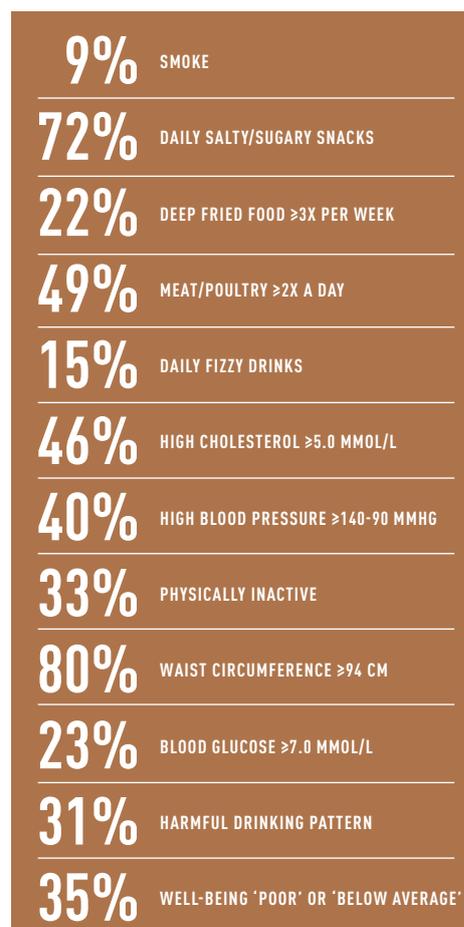


FIGURE 2: Prevalence of risk factors among farmers.

Conclusions

Changing human behaviour with respect to health and safety is challenging in most contexts. It is even more so in farming where farmers are self-employed and work alone.

As a consequence, the culture of health and safety that underpins beliefs, values and behaviours varies from individual to individual, and consequently from farm to farm. Teagasc, in partnership with academic partners, and policy and industry stakeholders, takes a leading role in promoting a transdisciplinary approach to the design, implementation and testing of initiatives supporting farmers to adopt healthier and safer behaviours.

References

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