



HSE National Office for Suicide Prevention  
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# Dying to Farm: Developing a Suicide Prevention Intervention for Farmers in Ireland

**AUTHORS:**

Tomás Russell, Alison Stapleton, Anne Markey  
and Louise McHugh

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Connecting for Life

## PROJECT TITLE

Dying to Farm: Developing a Suicide Prevention Intervention for Farmers in Ireland

## KEY MESSAGES

- 23.4% of farmers that participated in the national survey were considered at risk for suicide (i.e., reported having suicidal thoughts and/or urges over the past two weeks).
- A number of factors contributed to farmers' distress, well-being, and suicidality. These factors included (i) identity, relationships with land, (ii) government policies designed to reduce climate change, (iii) representation of farmers in the media, (iv) outsiders not understanding the nature of farming, and (v) concern over the future of the farm.
- Among farmers, developing psychological skills (psychological flexibility and self-as-context) may reduce suicidal ideation and distress.
- It is important to note that, given the recruitment methods for the present studies, findings may not be generalizable to the whole of the farming population on the island of Ireland.

## AUTHORS

Tomás Russell<sup>1</sup>; Alison Stapleton<sup>1,2</sup>; Anne Markey<sup>1</sup>; Louise McHugh<sup>2</sup>.

## AFFILIATIONS

<sup>1</sup> School of Agriculture and Food Science, University College Dublin

<sup>2</sup> School of Psychology, University College Dublin

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## CONTEXT AND BACKGROUND

Mental health problems and suicide are continually reported as major concerns for those actively employed in the Irish farming sector. Relative to other occupational groups, farmers experience a higher burden of health problems including mental health (Roy et al, 2013) and suicide (Roberts et al, 2013). Agriculture is also the most dangerous sector in Ireland in which to work (HSA, 2020). However, from 2014 to 2019, death from suicide and self-harm for farmers in Ireland is consistently higher (with the exception of 2017) than death from farm accidents. Despite this, research has focused more on farm safety than mental health or mental health supports for farmers. To date, no published research has examined risk factors associated with suicide among Irish farmers nor has any published research examined intervention acceptability among farmers.

## AIM/OBJECTIVE(S)

The aims of the study are twofold;

- To investigate risk factors of mental health and suicide among farmers in Ireland.
- Identify acceptability/format/type of interventions to support mental health among the farming population in Ireland.

## METHODOLOGY

**One-to-one interviews:** Ten male farmers completed a 30-minute semi-structured interview with the Researcher via Zoom, an online video call application. Interview topics included farmers' views of existing mental health support services, farmers' mental health, farmers' perception of the general farming community's view of mental health, and which interventions were likely to work well for farmers (e.g., duration, delivery style, etc.). Participants were recruited through personal networks (including snowballing), social networking websites, and key associations (e.g., Teagasc).

**Focus groups:** Three sets of five farmers and one set of five professionals providing support services to farmers participated in hour-long focus groups. In addition to responding to prompts used in the one-to-one interviews, focus group participants completed three popular exercises used in psychological interventions to feedback on their experience, perceived utility, etc. Participants were recruited through personal networks (including snowballing), social networking websites, and key associations (e.g., Teagasc).

**National-level survey:** 256 farmers (185 male; 71 female) recruited via social media posts, farmers were invited to complete self-report measures of psychological distress, well-being, suicidality, farming-related stressors, farm attachment, and psychological skills (i.e., psychological flexibility, cognitive fusion, and self-as-context) through Qualtrics (an online survey platform).

To determine the relationships between farmers' distress, well-being, suicidality, farm stress, and psychological skills, a series of one-tailed Pearson's product moment correlations were used. Relationships between farm attachment and other variables were analyzed using a series of two-tailed Pearson's product moment correlations. To determine whether farm

holders and non-holders differed in terms of distress, well-being, suicidality, and farm stress, independent-samples t-tests were used.

A note on representativeness of the sample based on the national distribution in terms of gender and age: As per the Central Statistics Office's (CSO) Census of Agriculture 2020, the agriculture labor force is comprised of ~ 278,600 persons (73.04% male; 26.96% female) most of which are aged 65+ years (32.55%; 55-64 years = 24.59%; 45-54 years = 21.87%; 35-44 years = 13.91%; <35 years = 7.08%). We had a comparable distribution of males and females in our sample of 256 farmers for the national-level survey (i.e., our sample were 72.27% male and 27.73% female), although our sample were younger than the CSO's cited age (i.e., our average age was 38.57 years (SDage = 13.225)). This difference in age may have resulted from the recruitment strategy used for our national-level survey (i.e., online). As such, knowledge users should exercise caution in applying/generalizing our findings to the entirety of the agriculture labor force on the island of Ireland.

## RESULTS / FINDINGS

In our national-level survey sample of 256 farmers:

- **23.4% of farmers were considered at risk for suicide** (i.e., reported having suicidal thoughts and/or urges over the past two weeks).
- **Farm holders reported statistically significantly higher suicidal ideation** and higher distress than non-holders.

### T-Test Results Comparing Farm Holders and Non-Holders on Distress, Well-Being, Suicidality, and Farm Stress

	Farm Holders			Non Holders			df	t	p
	n	M	SD	n	M	SD			
Distress	141	22.47	14.094	115	17.81	7.389	219.622	3.395	<.001
Well-being	141	37.28	15.048	115	53.7	13.762	254	-9.026	<.001
Suicuality	141	1.5	2.186	115	0.43	1.068	211.69	5.113	<.001
Farm Stress	133	65.827	14.05	108	64.722	13.411	239	0.62	0.536

- **55.5% of farmers reported experiencing moderate to extremely severe depression**, 44.1% of farmers reported experiencing moderate to extremely severe anxiety, and 37.9% of farmers reported experiencing moderate to extremely severe stress.

### Severity of Farmers' Depression, Anxiety, and Stress as per Depression, Anxiety, and Stress Scales-21 Categorizations

	Depression % (n)	Anxiety % (n)	Stress % (n)
Normal	32% (82)	38.3% (98)	46.9% (120)
Mild	12.5% (32)	17.6% (45)	15.2% (39)
Moderate	29.7% (76)	21.1% (54)	11.7% (30)
Severe	23.8% (61)	24.8% (38)	14.5% (37)
Extremely Severe	2% (5)	8.2% (21)	11.7% (30)

- The top five stressors for farmers were: (i) **government policies** designed to reduce climate change, (ii) **outsiders** not understanding the nature of farming, (iii) concern over the **future of the farm**, (iv) not enough time to spend together as a family in recreation, and (v) limited **social interaction** opportunities.
- Farm stress is statistically significantly associated with higher suicidal ideation ( $r = .245$ ,  $p < .001$ ) and higher distress ( $r = .427$ ,  $p < .001$ ). Psychological skills (psychological flexibility and self-as-context) were associated with lesser suicidal ideation (PsyFlex:  $r = -.449$ ,  $p < .001$ ; Self-as-context:  $r = -.386$ ,  $p < .001$ ) and lesser distress (PsyFlex:  $r = -.727$ ,  $p < .001$ ; Self-as-context:  $r = -.519$ ,  $p < .001$ ).

As per our qualitative interview and focus group data:

- Key factors impacting farmer mental health and suicide include identity (e.g., *“as a farmer you’re expected to get on with things as such”*), farming-specific stressors, representation in the media (e.g., *“You’d often feel that the young farmer doesn’t have a voice in the media, and I suppose that’s our own fault”*), and relationship with the land (e.g., *“Land gets in the lad’s mind like, on his own all day and thinking about it, thinking about it, thinking about it he’s just going to snap at some stage. Whether it’s the snap on his own or kill someone else and kill himself afterwards”*).
- **Farmers prefer experiential, group-based interventions** delivered by experts in psychology that are also familiar with the nature of farming. In this context, “experiential” means active interventions that rely more on engagement and physicalizations of key metaphors, than traditional didactic, lecture-style deliveries.
- Exercises used in **psychological interventions targeting farmers need to be tailored**. For example, an exercise such as “Leaves on a Stream” (cognitive diffusion exercise) may evoke unwanted internal experiences that undermine the intended function of the intervention (e.g., rather than referring to the metaphor itself, farmers mentioned thinking about the coming Winter, going to work in the dark only to come home in the dark, and feeling a sense of dread).

## RECOMMENDATIONS

### Overall Recommendations

- Provide farmers with tailored, experiential mental health supports that are delivered by professionals in psychology that are familiar with farming.
- Evaluate the efficacy and effectiveness of experiential mental health supports that are tailored towards farmers.
- Include farmers in the development and implementation of public policies that impact the occupation of farming (e.g., policies designed to reduce climate change).
- Present these findings to policy makers and service providers to get insights from their perspectives, particularly with regard to the feasibility of scaling the identified type of interventions (i.e., group-based, peer-led, experiential interventions) to the farming community at large.
- Publicly engage in mental health awareness events (e.g., #AgMentalHealthWeek) to normalize mental health challenges and increase awareness of existing mental health supports.

### Recommendations for policy makers

- Include farmers in the development and implementation of public policies that impact the occupation of farming.
- Support initiatives testing tailored, experiential mental health supports for farmers.

### Recommendations for services

- Employ professionals in psychology that are familiar with farming to deliver support services to farmers. Provide additional suicide alertness training to these employees.
- Support existing employees working with farmers in acquiring a broad knowledge of farming and its associated challenges and benefits.
- Include farmers' voices in the development and implementation of support services intended to beneficially impact farmer mental health and well-being. For example, survey farmers of their experience of existing supports, support initiatives aiming to facilitate peer-led interventions, etc.

### Recommendations for front-line practitioners

- When providing support services to farmers, consider using experiential, group-based interventions.
- When providing support services to farmers, acquire a broad understanding of the nature of farming and its associated challenges and benefits.

### Recommendations for CfL priority group

- Engage in mental health awareness events (e.g., #AgMentalHealthWeek) to normalize mental health challenges and increase awareness of existing mental health supports
- When safe and possible, continue to advocate for yourself and other farmers to ensure your voice is heard.
- Reach out to existing support services if you or someone you know want support or are experiencing distress.



## LINKS / SUPPLEMENTARY MATERIALS

Sample media coverage of the project:

- <https://www.irishfarmersmonthly.com/images/pastissues/2022/february2022.pdf>
- <https://www.irishexaminer.com/farming/arid-40982102.html>
- <https://www.irishexaminer.com/farming/arid-40982405.html>
- <https://www.independent.ie/business/farming/news/climate-policies-have-the-biggest-impact-on-farmers-mental-health-41898058.html>
- <https://www.independent.ie/business/farming/news/study-reveals-severity-of-farmer-mental-health-crisis-42055749.html>
- <https://www.agriland.ie/farming-news/survey-finds-climate-policies-biggest-stress-factor-for-farmers/>
- <https://www.agriland.ie/farming-news/some-farmers-feel-they-were-scapegoated-for-climate-change-ucd-research/>
- <https://www.farmersjournal.ie/over-half-of-farmers-experiencing-depression-728070>
- <https://www.rte.ie/radio/radio1/clips/22158768/>

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## CONTACT DETAILS

Tomás Russell;

Email: [tomas.russell@ucd.ie](mailto:tomas.russell@ucd.ie)



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**HSE Oifig Náisiúnta um Fhéinmharú a Chosc**  
Ospidéal Stewart, Baile Phámar, Baile Átha Cliath 20

**HSE National Office for Suicide Prevention**  
Stewarts Hospital, Palmerstown, Dublin 20

Tel: 01 7785112

Email: [info@nosp.ie](mailto:info@nosp.ie)

Twitter: [@NOSPIreland](https://twitter.com/NOSPIreland)

[www.nosp.ie](http://www.nosp.ie)