



Centre for Forensic
Behavioural Science



Why accurate assessment of family violence homicide risk is not possible

Dr Ben Spivak & Prof. Troy McEwan

4 August 2025

Applied Research in Crime and Justice Conference
Sydney Australia



This research uses Victoria Police data but we are not speaking on behalf of Victoria Police

Prof. McEwan is employed by Forensicare, but not representing Forensicare or its views

No conflicts of interest to declare



He Kidnapped, Beat And Tortured His Wife. Free On Bond, He Killed Her.

We know the risk factors for domestic homicide. So why are we failing to protect those in the gravest danger?

Huffington Post,
September 2016

What 70 per cent of men who kill their partners have in common

Sydney Morning Herald, July 2024

Strangulation has long been identified as one of the highest risk factors of intimate partner femicide as has coercive and controlling behaviours and relationship separation. Understanding what constitutes high-risk behaviours should inform decisions made by judicial officers, including in bail-related decisions.

Kate Fitzgibbon & Christine Nixon, The Age,
April 2024

Tougher penalties for men who break family violence orders, tracking of those deemed likely to murder a partner or ex and domestic violence offender registers are among measures being proposed as community anger mounts over the killing of Victorian women by men.

The Age, April 2024

What are these recognised risk factors?

- ▲ Access to firearms
- ▲ Threats with a weapon
- ▲ Threats to kill victim
- ▲ Strangulation of victim
- ▲ Sexual assault of victim
- ▲ Stalking/controlling behaviour towards victim
- ▲ Abused victim while pregnant
- ▲ Alcohol/substance use
- ▲ Past physical violence
- ▲ Mental health problems
- ▲ Unemployed



Existing risk assessment approaches incorporating such factors

- ▲ Danger Assessment & Lethality Screen

- ▲ Threats with weapon, threats to kill, victim belief partner capable of homicide, access to guns, strangulation, extreme jealousy/control, suicide attempts/threats, stalking, unemployment, unrelated child

Messing et al., 2017

- ▲ Australian National Research Organisation for Women's Safety (ANROWS) guidance

- ▲ Past physical violence, recent separation, sexual violence, strangulation, stalking, threats to kill, access to/use of weapons, escalation, pregnancy/new birth, coercive control

Toivonen & Backhouse, 2018

Factors relevant to adult victim survivor

☐ Self-assessed level of risk

Factors relevant to perpetrator

☐ Has ever harmed or threatened to harm victim or family members (including child/ren)

Factors relevant to perpetrator (continued)

☐ Controlling behaviours*

☐ Physical harm

☐ History of family violence

☐ Emotional abuse

If no, please ask the following questions about the perpetrator, in addition to the set of questions below.

Question	Yes	No	Comments (or not known)
----------	-----	----	-------------------------

Have they controlled your day-to-day activities (e.g. who you see, where you go) or put you down?*

☐ Yes ☐ No

Have they physically hurt you in any way? (hit, slapped, kicked or otherwise physically hurt you)

☐ Yes ☐ No

Question	Yes	No	Comments (or not known)
----------	-----	----	-------------------------

Is more than one person making you feel afraid? (Are there multiple perpetrators)

☐ Yes ☐ No

The following risk related questions refer to the perpetrator:

RECENTY	Are they currently unemployed?*	<input type="checkbox"/>	<input type="checkbox"/>	
	Have they recently...			
	threatened or attempted suicide or self harm?*	<input type="checkbox"/>	<input type="checkbox"/>	
	misused alcohol, drugs or other substances? (specify substance)	<input type="checkbox"/>	<input type="checkbox"/>	
	followed you, repeatedly harassed or messaged/emails you? *	<input type="checkbox"/>	<input type="checkbox"/>	
	been obsessively jealous towards you?*	<input type="checkbox"/>	<input type="checkbox"/>	
	has any violence increased in severity or frequency? (what and how)	<input type="checkbox"/>	<input type="checkbox"/>	

*May indicate an increased risk of the victim being killed or almost killed (serious risk factors).

Question		Yes	No	Comments (or not known)
PERPETRATOR ACTIONS	Have they ever...			
	controlled your access to money, or had a negative impact on your financial situation?	<input type="checkbox"/>	<input type="checkbox"/>	
	seriously harmed you? (identify type of harm)	<input type="checkbox"/>	<input type="checkbox"/>	
	assaulted you when you were pregnant?*	<input type="checkbox"/>	<input type="checkbox"/>	
	threatened to kill you?*	<input type="checkbox"/>	<input type="checkbox"/>	
	threatened or used a weapon against you?*	<input type="checkbox"/>	<input type="checkbox"/>	
	tried to choke or strangle you?*	<input type="checkbox"/>	<input type="checkbox"/>	
	forced you to have sex or participate in sexual acts when you did not wish to do so?*	<input type="checkbox"/>	<input type="checkbox"/>	
	harmed or threatened to harm a pet or animal?*	<input type="checkbox"/>	<input type="checkbox"/>	
SELF-ASSESSMENT	Do they have access to weapons?*	<input type="checkbox"/>	<input type="checkbox"/>	
	Do you believe it is possible they could kill or seriously harm you?*	<input type="checkbox"/>	<input type="checkbox"/>	
	Do you believe it is possible they could kill or seriously harm children or other family members?*	<input type="checkbox"/>	<input type="checkbox"/>	
	Do you feel safe when you leave here today?	<input type="checkbox"/>	<input type="checkbox"/>	
IMMINENCE	Would you engage with police if you felt unsafe? (If no, discuss barriers to why not)	<input type="checkbox"/>	<input type="checkbox"/>	
	Have you recently separated from your partner?*	<input type="checkbox"/>	<input type="checkbox"/>	
	Has a crime been committed? (Not to be asked directly of victim survivors. Criminal offences include physical abuse, sexual assault, threats, pet abuse, property damage, stalking and breaching IVOs)	<input type="checkbox"/>	<input type="checkbox"/>	

* May indicate an increased risk of the victim being killed or almost killed (serious risk factors).

RISK TO CHILDREN

Question	Yes	No	Comments (or not known)
Have they ever threatened to harm the child/children? (identify which children)	<input type="checkbox"/>	<input type="checkbox"/>	
Have they ever harmed the child/children?*	<input type="checkbox"/>	<input type="checkbox"/>	
Have children ever been present during/exposed to family violence incidents?	<input type="checkbox"/>	<input type="checkbox"/>	
Are there child/children in the family who are aged under 1 year?*	<input type="checkbox"/>	<input type="checkbox"/>	

A separate risk assessment must be completed for each child discussed in this assessment.

* May indicate an increased risk of the victim being killed or almost killed (serious risk factors).

Previous research in the area

- ▲ Much research is not fit for purpose:
 - ▲ Descriptive studies of homicide cases (e.g. death review panels)
 - ▲ Case control studies
- ▲ The study design that is best for assessing risk is a longitudinal cohort study.
 - ▲ Why?
 - ▲ Predictive inference lives and dies on accurate base rate of outcome (e.g. the prevalence of homicide in the population under study)
 - ▲ We need to have accurate information about what sort of follow up period our risk applies to

Previous research in the area

- ▲ We found eleven studies with prospective designs, however...
 - ▲ Attrition rates were enormous (40-45%) in all but 3 studies.
 - ▲ Of the remainder:
 - One study had a tiny sample size ($n = 100$)
 - One study did not report relevant analyses
 - One study was excellent, but found huge error rates in prediction of homicides (~98% of cases predicted to result in homicide did not) and did not appear to include a lot of 'risk factors' identified in previous studies.

Gaps in our knowledge

- ▲ We have almost no population-based prospective studies that allow inference about prediction without significant attrition
- ▲ No studies with suitable designs that examine the risk factors that have been identified as extremely important 'red flags' for homicide.
- ▲ No research on family violence (all intimate partner specific)
- ▲ No Australian research

Our research questions

1. Can we predict lethal/near lethal family violence and/or intimate partner violence using commonly recognised risk factors for intimate partner homicide?
 - ▲ Do any specific risk factors predict lethal/near-lethal violence?
 - ▲ What do specific risk factors add to prediction?
2. Can a multivariate model developed from a combination of these risk factors predict lethal/near lethal family violence?

Method

- ▲ Prospective longitudinal study using police recorded family violence
- ▲ 7 month population of family violence reports (FVRs) recorded by Victoria Police (n = 38,454) from September 2019 – March 2020
- ▲ Each party followed up in Victoria Police data bases for 365 days from the original FVR
- ▲ Lethal/near lethal outcomes identified from presence of authorised or unauthorised charges linked to a family violence report with same incident number
 - homicide/attempted homicide offences;
intentionally/recklessly/attempt to cause serious injury involving gross violence

Method

- ▲ Drew risk factors from L17 Family Violence Report
- ▲ Required if police perceive family violence as defined in the *Family Violence Protection Act* (2008)
- ▲ 39 questions asked by police at time of original report
- ▲ Scored Yes / No / Info. Not available.

FAMILY VIOLENCE REPORT				3 / 5	VP Form L17
VP Reg Number Completing: <input type="text"/>		LEDR No.: <input type="text"/>		Approving Sgt: <input type="text"/>	
AFM: <input type="text"/>		Respondent: <input type="text"/>			
VP-SAFvR and Additional Risk Factors					Score if YES
INFORMATION ABOUT FAMILY VIOLENCE Scored from interview with AFM, Respondent, or relevant others (e.g. children, other family)					
1.	Does the Respondent act in ways that are jealous or controlling of the AFM? <i>Do they control who they can see/talk to, where they can go, access to money, access to their phone, or other things? OR are they constantly monitoring or checking on the AFM's behaviour (incl. online behaviour)?</i>	No	Yes	Info. not available	1
2.	Has the Respondent ever threatened to seriously harm or kill the AFM?	No	Yes	Info. not available	
3.	Has the Respondent ever been physically violent towards the AFM or anyone else? <input type="checkbox"/> AFM <input type="checkbox"/> People who are not the AFM (tick all that apply)	No	Yes	Info. not available	
4.	Has the Respondent ever used physical violence towards the AFM while the AFM was pregnant?	No	Yes	N/A Info. not available	
5.	Has the Respondent ever strangled or suffocated the AFM, or attempted to do this?	No	Yes	Info. not available	
6.	Has the Respondent ever sexually assaulted the AFM? <i>if sexual assault disclosed contact SOCIT</i>	No	Yes	Info. not available	
7.	Has the Respondent ever threatened or assaulted the AFM with a weapon or firearm? <input type="checkbox"/> Firearm <input type="checkbox"/> Other weapon (tick all that apply)	No	Yes	Info. not available	
8.	Does the AFM or Respondent have access to firearms?	No	Yes	Info. not available	
9.	Has the Respondent ever harmed or threatened to harm <i>another</i> family member?	No	Yes	Info. not available	
10.	Has the Respondent ever harmed or threatened to harm a family pet?	No	Yes	Info. not available	
Only to be asked if AFM no longer has/wants a relationship with the Respondent:		No	Yes	N/A Info. not available	
11.	Has the Respondent been following/approaching or repeatedly contacting/harassing the AFM? <i>if Yes, consider whether stalking is present and requires a response</i>	No	Yes	Info. not available	
12.	How long has the abusive behaviour been occurring? Ask AFM about when any abusive behaviour identified in response to Q 1 – 11 first occurred. Record time between first occurrence and current incident as DURATION IN MONTHS: <input type="text"/> <i>Score as less than a month if no pattern of abuse is evident or reported</i>	- 1 month + 1 month (score 1)	Info. not available	1	
13.	Has the Respondent's abusive behaviour recently become worse? <i>(E.g. Started recently or recently become more violent or more frequent)</i>	No	Yes	Info. not available	
14.	How fearful is the AFM that the Respondent may seriously harm or kill them?	Info. not available	Not fearful	Fearful	Very fearful
INFORMATION ABOUT INVOLVED CHILDREN Scored from observation and/or interview with AFM, Respondent or relevant others (e.g. children, other family)					
15.	Were there children (under 18) present during the current incident?				

Results

- ▲ 55 cases of lethal/near lethal violence over 12 months (0.0014% or 140 per 100,000 people)

Male-to-female intimate partner femicide risk factor descriptives

FVR item	Yes <i>n</i> (%)	Lethal/near lethal FIPV <i>n</i> = 55 <i>n</i> (% of row <i>N</i>)	No lethal/near lethal FIPV <i>n</i> = 38,399 <i>n</i> (% of row <i>N</i>)	Odds ratio (<i>CI</i>) / <i>t</i> (<i>CI</i>)
Jealous or controlling of AFM	12,123 (31.53)	16 (0.13)	12,107 (99.87)	0.89 (.46, 1.63)
Threatened serious harm to AFM	7,337 (19.08)	12 (0.16)	7,325 (99.84)	1.18 (.57, 2.29)
Violent during AFM pregnancy	1,482 (3.85)	<6 (<0.40)	>1,476 (>99.60)	≈2.40 (.78, 6.24)
Strangled or choked AFM	3,191 (8.30)	<6 (<0.19)	>3,186 (>99.81)	≈.75 (.23, 2.36)
Sexual assault of AFM	1,453 (3.78)	0 (0.00)	1,453 (100.00)	0.00 (.00, 1.77)
Threatened with weapon/firearm	2,646 (6.88)	<6 (<0.23)	>2,640 (>99.77)	≈1.25 (.42, 3.38)
Access to firearms	1,290 (3.35)	<6 (<0.47)	>1,284 (>99.53)	≈1.75 (.33, 5.15)
Stalking/harassment of AFM	5,026 (13.07)	9 (0.18)	5,017 (99.82)	1.30 (0.56, 2.69)
Respondent is unemployed	11,303 (29.39)	24 (0.21)	11,279 (99.79)	1.86* (1.04, 3.28)
Respondent mental health problems	13,572 (35.29)	25 (0.18)	13,547 (99.82)	1.53 (.86, 2.69)
Respondent substance problems	13,146 (34.19)	27 (0.21)	13,119 (99.79)	1.86* (1.05, 3.27)
Respondent age, <i>mean</i> (<i>SD</i>)	-	32.13 (10.04)	35.85 (13.22)	2.74** (1.00, 6.44)

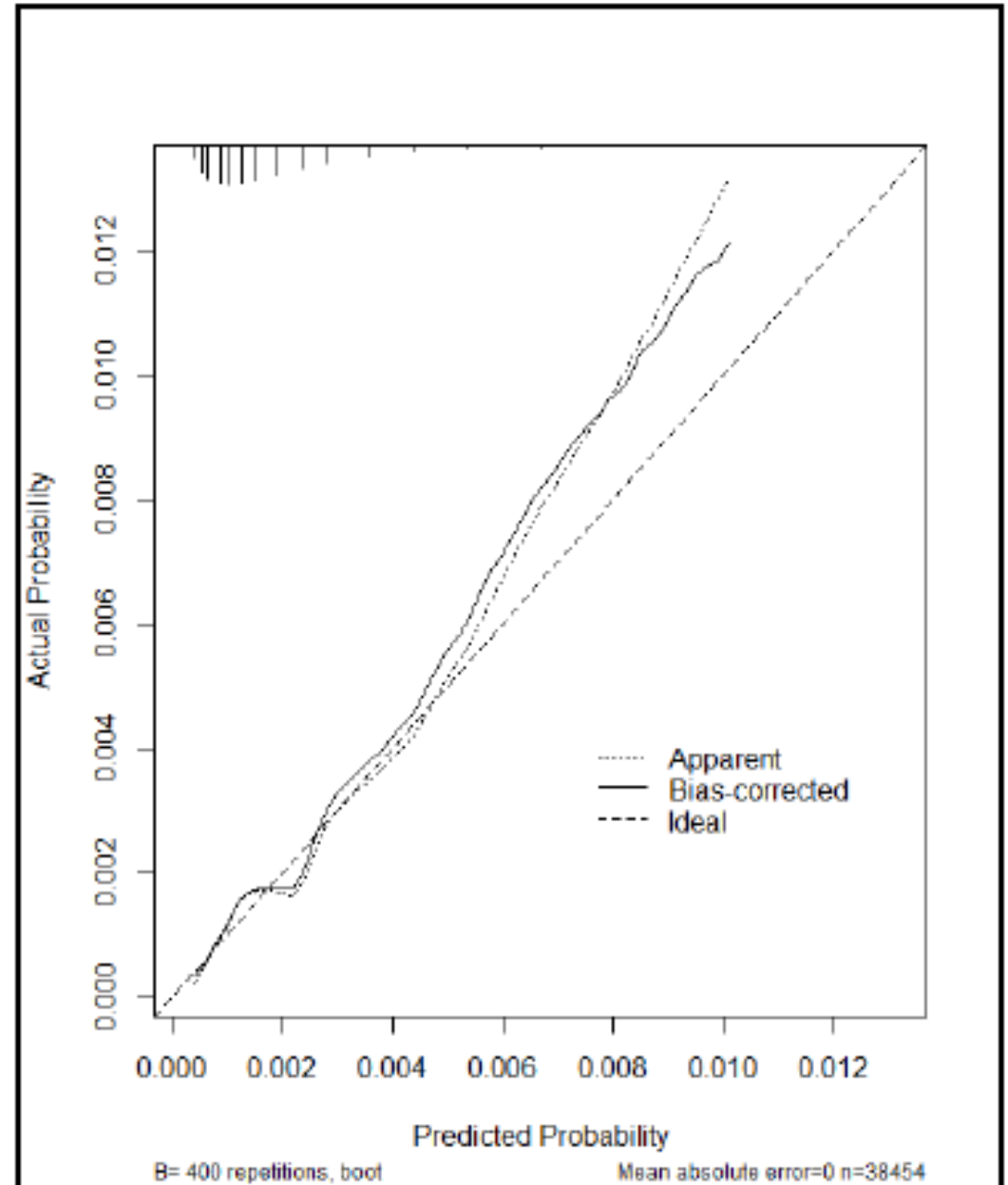
Note: AFM: affected family member; FIPV: family and intimate partner violence; cells of less than *n* = 6 have been suppressed to reduce the risk of individuals being identified; exact values of cells that can be used to deduce cells less than 6 have been consequentially suppressed; odds ratios reflect the odds of a risk factor being present among individuals with lethal/near lethal FIPV recidivism compared with those without lethal/near lethal FIPV recidivism; ≈ : denotes an approximate odds ratio has been used to reduce the risk of individuals being identified; * <.05; ** <.01; *** <.001.

Results

- ▲ 55 cases of lethal/near lethal violence over 12 months (0.0014%)
- ▲ 3 risk factors significantly associated with lethal/near lethal violence by the same person
- ▲ Logistic regression to examine prediction of each risk factor while holding all others constant:
 - ▲ Only assault while pregnant was significantly associated with outcome (odds ratio = 2.94)
 - ▲ However, its presence increased the absolute probability of lethal/near lethal violence by only 0.00000000111

Results

- ▲ Logistic regression model including all 12 risk factors
- ▲ Predicted probabilities AUC = .67 (.60-.73)
- ▲ This means that the model could discriminate between those who did and did not engage in lethal/near lethal violence
- ▲ This does not mean that prediction was accurate!



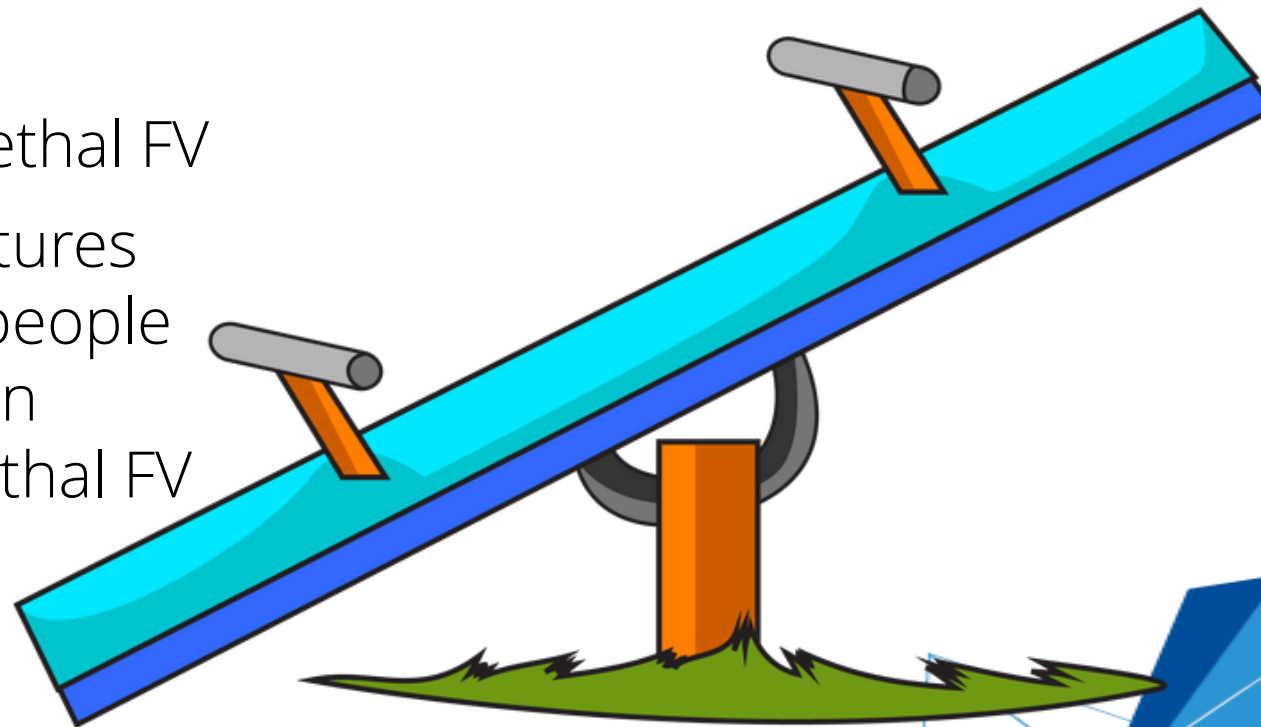
Results

99.7% of those who are 'high risk' will not go on to engage in lethal/near lethal FV

High risk captures only 25% of people who engage in lethal/near lethal FV

High risk captures 85% of people who engage in lethal/near lethal FV

But...99.8% of those who are 'high risk' will not go on to engage in lethal/near lethal FV



Summary

1. When examined using an optimal prospective longitudinal design only 3 recognised risk factors for intimate partner homicide predicted lethal/near lethal family violence, and only one made a unique contribution to prediction
2. None of the risk factors added meaningfully to the absolute probability of lethal/near lethal violence, even those significantly related in univariate analyses



Summary

3. The combination of risk factors could discriminate between those with and without lethal/near lethal violence with moderate effect

BUT

- ▲ Error rates in prediction were enormous – at best, around 997 out of every 1000 cases predicted to engage in lethal/near lethal violence did not!
- ▲ The more risk factors present, the more the model over-estimated risk of lethal/near lethal violence



Limitations

- ▲ Police reports vastly under-estimate family violence, the population in this study is not representative of all family violence
- ▲ Police may not detect presence of risk factors
 - ▲ Fail to ask questions
 - ▲ Victims don't report to police
- ▲ Near-lethal violence may not be identified by police or result in applications for charge
 - ▲ Less likely to affect lethal violence so results likely hold for that outcome



How to understand these findings in relation to past research

- ▲ Studies on risk of homicide MUST take into account the prevalence of homicide in their population
- ▲ Very few people with any risk factors (or combinations of risk factors) will engage in lethal/near-lethal violence
- ▲ The risk factors have no predictive value because of the low base rate of lethal/near lethal violence in FV cases
- ▲ If homicide was present in 3% of cases increased odds would matter
- ▲ If homicide is present in $<.0001\%$ of cases, increased odds matter less



Implications for policy and practice

- ▲ Risk of homicide is not being assessed in any meaningful way by existing IPV 'lethality' risk assessments
- ▲ Many of the well known 'risk factors' for intimate partner homicide may not actually predict homicide
- ▲ Any sort of screening of FV cases on the basis of these 'risk factors' must acknowledge that all cases screened in are at extremely low risk of homicide in the next 12 months
- ▲ Implementing highly restrictive interventions based on such 'risk assessments' is difficult to justify on any evidence-based grounds



Bail reforms to apply to high-risk offender

The State Government forced a number of amendments to the LNP's bill.

Attorney-General Yvette D'Ath said one of the changes would ensure the bail reforms would apply to high-risk offenders, including those charged with strangulation, stalking and even animal cruelty charges.

She said there needed to be better use of domestic violence risk assessments that were used in community already.

"A DV risk assessment determines that a matter is high-risk then the court should take that on board," she said.

"We also think that matters involving strangulation — because of overwhelming evidence that that activity is a precursor to murder — and also if a victim is currently in a high-risk team ... that evidence should be going before the court about that."

ABC, 2017

Canada has flipped the burden of proof for bail in cases of repeated intimate partner violence

CBC, 2017

'Long overdue': ankle monitors and bail crackdown among NSW government's proposed domestic violence law reforms

Changes include reversing presumption of bail for anyone charged with the most serious domestic violence-related offences

Guardian, 2024

Bail rules and offender tracking to lead national cabinet talks

Financial Review, 2024

What else can we do?



What else can we do?

Reduce dominant focus on homicide in risk assessment/management and take a public health approach to reducing the entire problem

1. Focus risk assessment on future FV/severe FV which can be predicted – prioritise those cases for intervention and likely prevent some homicides in the process
2. Provide support and intervention for broader drivers of family violence at primary and secondary levels to a wider range of people at risk of broader outcomes



What else can we do?

Prioritise safety measures in a more dynamic way:

1. Evidence based threat assessment not risk assessment
 - More focus on concern about current targeted threat and less on longer term risk
 - Recent acute dynamic indicators and how they combine with current and future situational factors to increase threat in the short term
 - Free up scarce highly intensive resources by focussing on cases where short-term threat is increased even if overall risk is low
2. Where longer term relative risk is higher but short-term threat low, interventions should focus primarily on support, rehabilitation, and recovery



What else can we do?

- ▲ BUT threat assessment should not be accepted unquestioningly
- ▲ It's possible that acute dynamic indicators are really common in FV cases and are NOT associated with severe violence or homicide
- ▲ Evaluate whether a threat assessment and management approach actually reduces harm in the population when applied in practice
- ▲ Use prospective research designs with control samples to do this
- ▲ Investigate *what* kinds of risk management are effective in different kinds of family violence cases



If you're interested in this study



The Limits of Predicting Near Lethal and Lethal Family and Intimate Partner Violence

by Michael D. Trood, Benjamin L. Spivak, James R. P. Ogloff, and Troy E. McEwan



last released
4 months ago





Questions?

Why accurate assessment of family violence homicide risk is not possible

Dr. Ben Spivak & Prof. Troy McEwan

Applied Research in Crime and Justice Conference, Sydney

4 August 2025

tmcewan@swin.edu.au

bspivak@swin.edu.au

CRICOS 00111D
TOD 3069