

All the different ways to look at TRAMADOL DEATHS

Pirkko Kriikku, PhD
Forensic Toxicologist



NATIONAL INSTITUTE FOR HEALTH AND WELFARE, FINLAND



What's the situation with drug deaths?

Does tramadol cause more deaths than before?

Why are there so many drug deaths in Finland?

Deaths?

Findings?

How many designer drug deaths have you seen?

What is it that they actually want to know???

Overdoses?

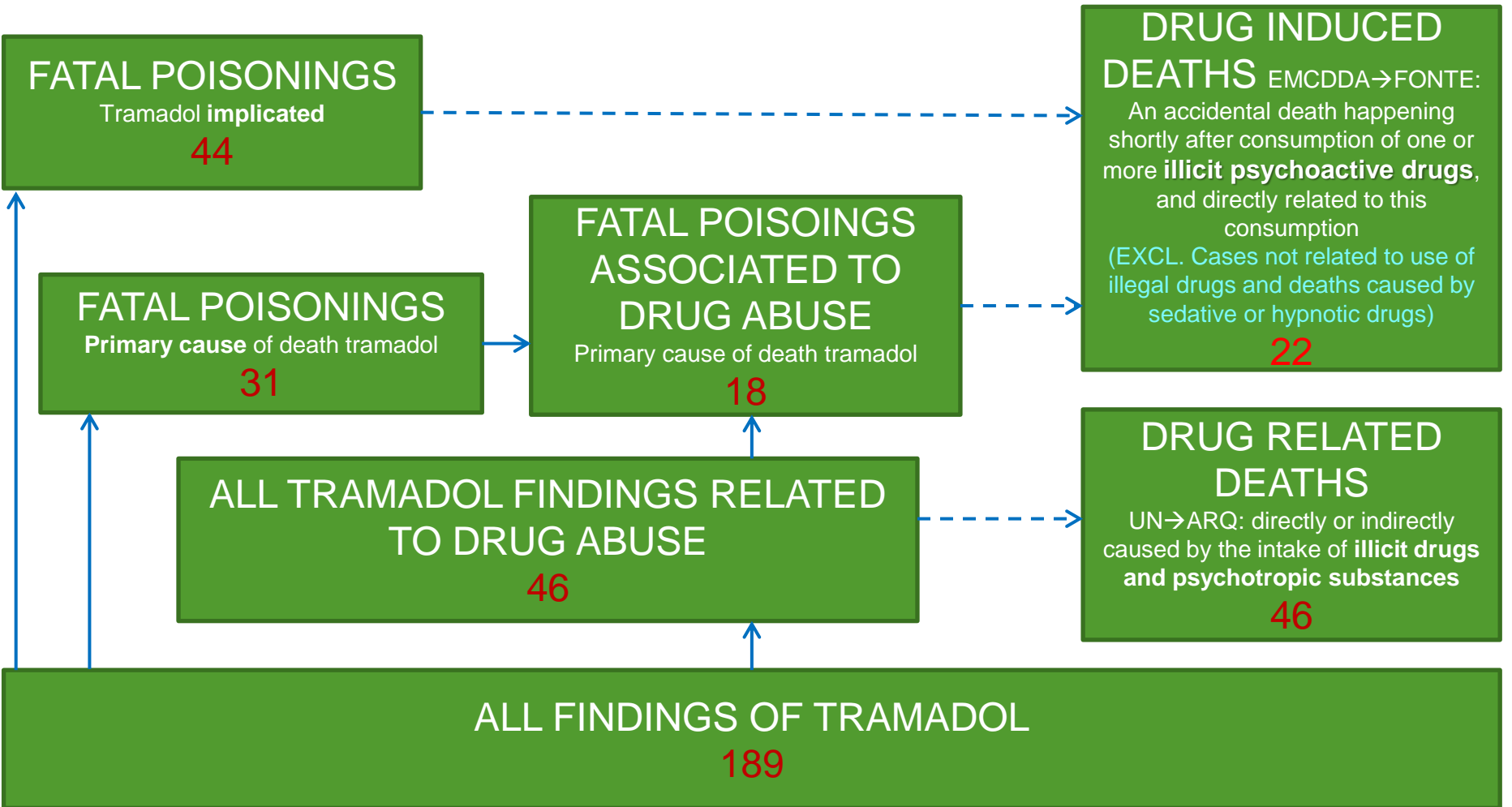
Poisonings?

Cases?



DEATHS & TRAMADOL





FATAL POISONINGS

Tramadol implicated

44

FATAL POISONINGS

Primary cause of death tramadol

31

FATAL POISONINGS ASSOCIATED TO DRUG ABUSE

Primary cause of death tramadol

18

ALL TRAMADOL FINDINGS RELATED TO DRUG ABUSE

46

ALL FINDINGS OF TRAMADOL

189

DRUG INDUCED DEATHS

EMCDDA → FONTE:

An accidental death happening shortly after consumption of one or more **illicit psychoactive drugs**, and directly related to this consumption

(EXCL. Cases not related to use of illegal drugs and deaths caused by sedative or hypnotic drugs)

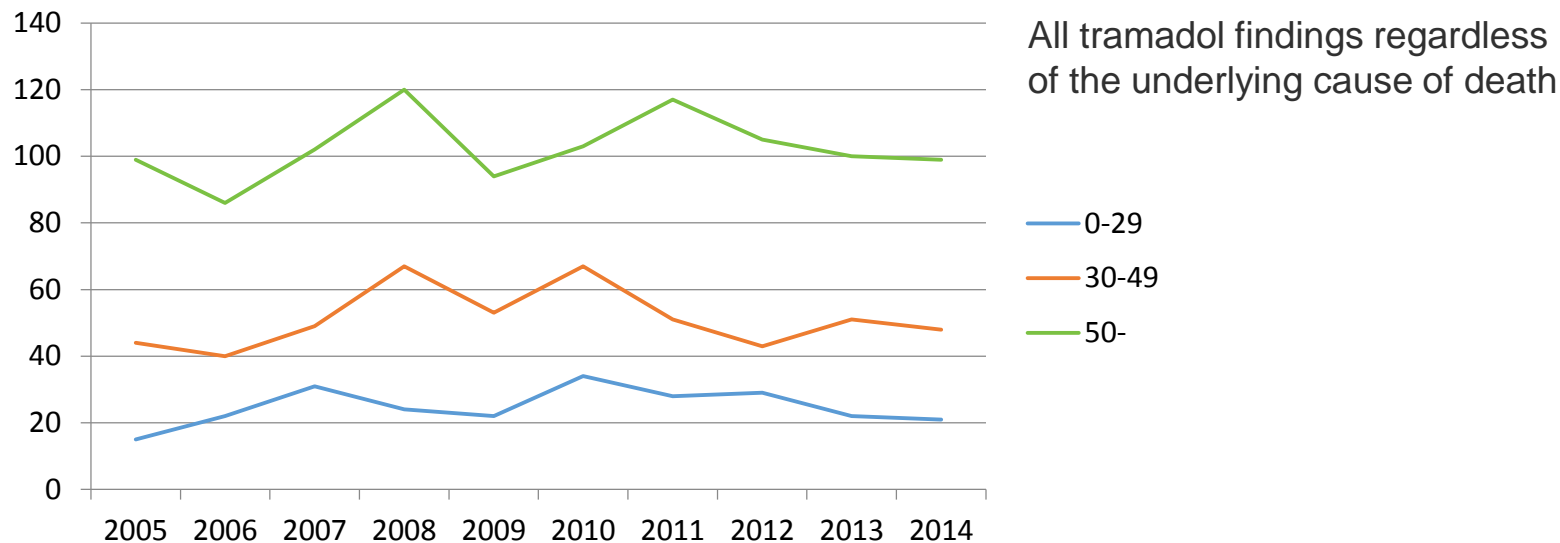
22

DRUG RELATED DEATHS

UN → ARQ: directly or indirectly caused by the intake of **illicit drugs and psychotropic substances**

46

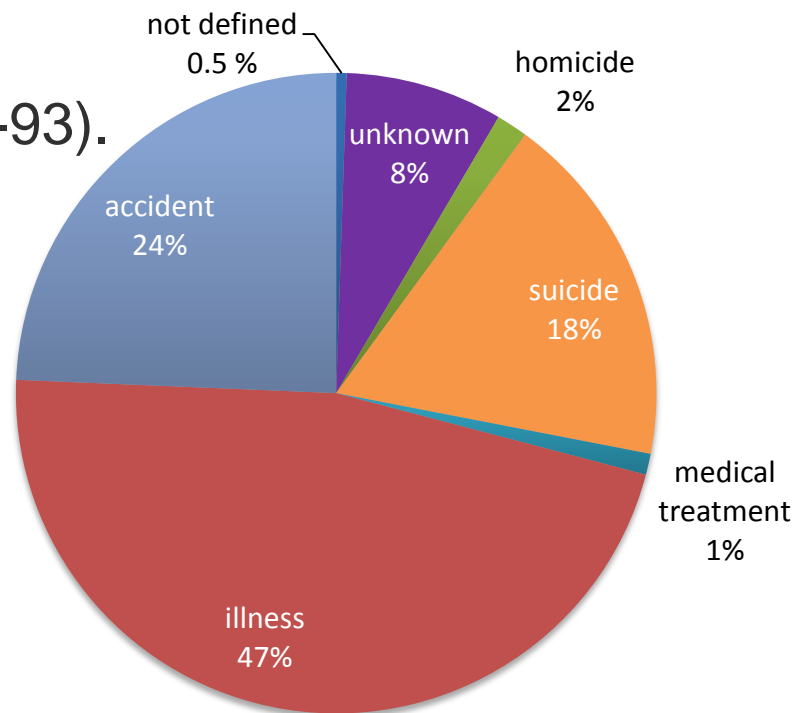
Age distribution in cases positive for tramadol



All findings of tramadol in 2014

- Detected in 189 cases.
- Mean age 53 years (range 20-93).

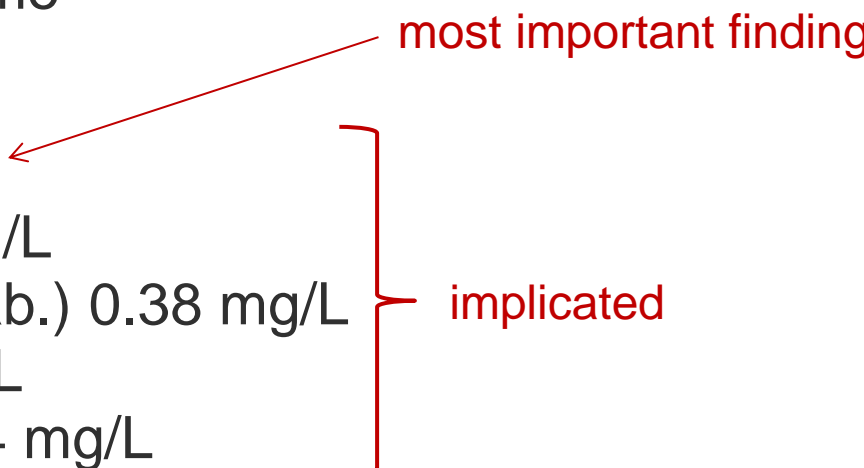
Manner of death	Mean age
homicide	36.7
medical treatment	42.0
unknown	45.4
suicide	46.1
accident	46.8
illness	60.2



Tramadol poisonings (selection D) (tramadol implicated)

- 22 cases in 2014
- In 17, tramadol was the most important finding
- 3 single poisonings
- Alcohol in five cases
- Mean age 31.3 years, 82% males

Case example 1 ("Fonte case")

- Male, 28 years
 - Alcoholism. "Had been eating prescription drugs like bread".
 - Was found dead at home
 - Fatal poisoning by
 - tramadol 2.5 mg/L
 - alprazolam 0.1 mg/L
 - clonazepam (metab.) 0.38 mg/L
 - pregabalin 15 mg/L
 - amphetamine 0.04 mg/L
- 
- most important finding
- implicated

Case example 2 ("Non-fonte case")

- Female, 55 years.
- Found dead and putrefied at home.
- Suspected suicide by medicinal drugs. No history of drug abuse.
- Fatal poisoning by
tramadol 21 mg/L
- Only other substance detected was citalopram (therap. conc.)

Conclusions

- "What you ask is what you get" (hopefully).
- The importance of
 - Clear protocols and checking that these are followed.
 - Continuity!
 - Identifying things that may affect trends.

