



E.M.C.D.D.A.

PROPOSED PROGRAMME OF WORK IN EPIDEMIDLOGY FOR 1995

OBJECTIVE

Richard Hartout

Minimum Stuff to Start Epidemiology

Programme -

The objective of the epidemiology work programme is to provide the Community and its Member States with objective, reliable and comparable epidemiological information at European level concerning drugs and drug addiction and their consequences. White Walk This information is intended to help provide them with an overall view of the drug and ching addiction situation when, in their respective areas of competence, they take measures or decide on action LArricle 1).

In 1995, the objective will be to lay the foundations for the larger term work programme. This will include establishing a coherent framework and working methods; careeing priorities and goods; and initiating activities that will lead, step by step, towards the fulfillment of the tasks of the department of epidemiology. It will also include defining criteria and procedures to ensure that the information collected and disseminated by the department is meets high standards in terms of scientific, technical and ethical quality.

CONTENTS

Information Needed Sources of Information Tosk's Preparatory work

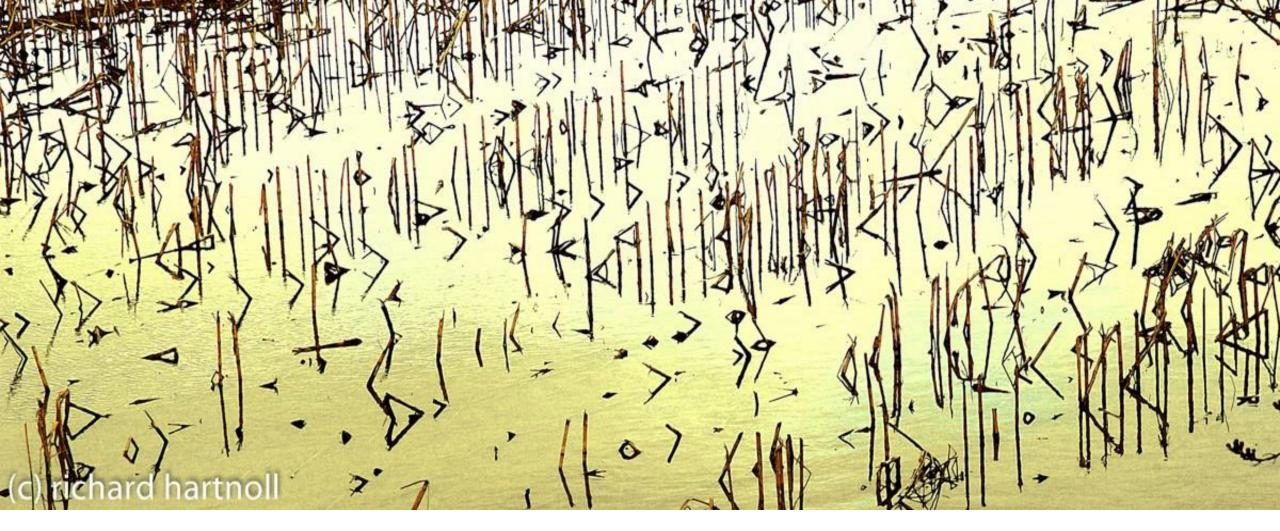
- A. Collect and analyze existing data

- B. Improve data and comparison methods

- C. Dissernination of data

- Do Couperation

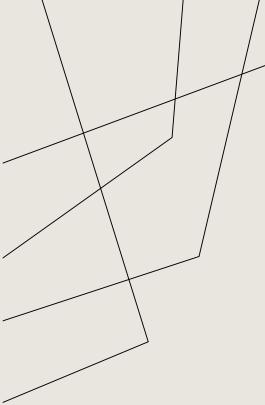




EARLY WARNINGS AND OUTBREAKS

A Sociological Perspective

Tim Rhodes and Kari Lancaster



Approach

Looking across viruses and drugs Looking at how outbreak sees and governs Looking at how early warning enacts outbreak

Outbreak

How does outbreak govern in relation to epidemics?

Early warning and drug outbreak

How do practices of drug early warning see outbreak? How might we see outbreak differently, and in 'long-view'

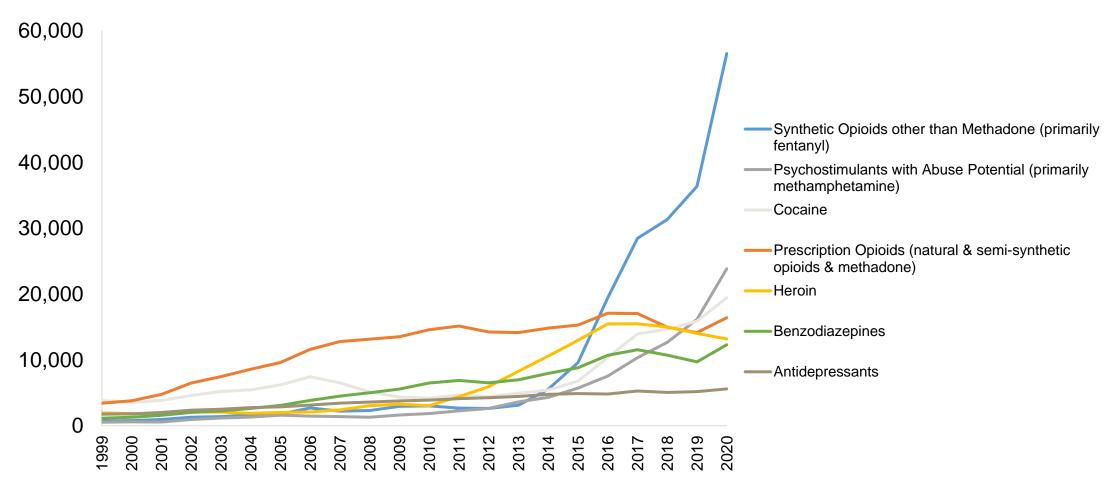
Opioid overdose outbreak

Seeing the 'slow violence' of outbreak

Seeing outbreak differently

Extending our focal point – longer past and future Expanding our field of vision – larger than local

U.S. OVERDOSE DEATHS, 1999-2020



^{*}Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision.

Source: **Centers for Disease Control and Prevention**, National Center for Health Statistics. Multiple Cause of Death 1999-2020 on CDC WONDER Online Database, released 12/2021.

OUTBREAK

- o Emergent, indeterminant, unpredictable
- Crisis beyond the local
- Catastrophic potential
- Beyond the routine, the local, the near and now
- Demands greater and faster attention

OUTBREAK

SPEED

"More rapid risk assessment" that can "offer round-the-clock access to information."

"Information in a **timely manner** [...] to respond through timely and effective actions to prevent or reduce risk."²

PREPAREDNESS

"Thanks to the foresight and timely actions of policy and decision-makers as well as a multidisciplinary group of practitioners, Europe has been well prepared and able to rapidly respond to protect public health."

CONTROL

"One of the reasons behind the increase in the fentanils is that **they are not controlled** under the United Nations drug control conventions."

While the causes of this shift away from fentanyl derivatives are unclear, the shift coincides with the introduction of **generic control measures** of fentanyl derivatives in China."¹

EARLY WARNING 'EVENTUATING' OUTBREAK

- Speedy control is a reflex response in outbreak
- We can look to how science 'sees' and 'enacts' outbreak...
- We can look at 'trends' and 'signals' in early warning itself...
- We can question, how is outbreak made in early warning?
- o The example of 2009 H1N1 (swine) influenza 'pandemic'
- Early warning 'eventuates' outbreak as:
 - a political and policy concern, sometimes as 'crisis'
 - a time-bound rupture, which 'breaks' from the present
 - an anticipation which demands action now

"The governing nexus of health security preparedness has the potential not just to harm but to produce events themselves."

"[We can] ask if this thing we call evidence is done well, or **could be made otherwise**."²



1998 MBDB is the first NPS risk assessed

1997 First EU legislation on new psychoactive substances (NPS):

Joint action 97/396/JHA concerning the information exchange, risk assessment and control of new synthetic drugs | EU Early Warning System (EWS) on NPS

> Ketamine and GHB risk assessed following their emergence in Europe

> > Lisbon I Norway joins the EWS I PMMA risk assessed | Cooperation 2002 agreement with PMMA controlled Europol

10 new Member States join the EWS

following EU enlargement: Cyprus,

Czechia, Estonia, Hungary, Latvia,

Lithuania, Malta, Poland, Slovakia

1999

assessment

First operating guidelines for

the risk assessment of NPS

published | 4-MTA is the first

NPS controlled following risk

2001

First annual meeting

of the EWS network in

TMA-2, 2C-I, 2C-T-2, 2C-T-7 risk assessed and controlled

New legislation strengthens the EU response to NPS: Council Decision 2005/387/JHA on the information exchange, risk assessment and control of new psychoactive substances | 13 NPS notified to the EWS | 900 seizures of NPS reported, amounting to 2 kg

First EMCDDA-Europol annual report on NPS | First internet monitoring study on hallucinogenic mushrooms | European Database on New Drugs (EDND) launched

2007

First operating guidelines for the EWS published | BZP is the first piperazine risk assessed | EU enlargement: Bulgaria and Romania join EWS | Emergence of Spice and mephedrone in Europe | 14 NPS notified

2008

Mephedrone and JWH-018 notified | BZP controlled | First e-POD study on GHB and GBL 13 NPS notified

2009 Expert meeting on Spice |

EWS alert on Spice |

21 NPS notified

New guidelines for the risk assessment of NPS | Working arrangement with European Medicines Agency (EMA) | Mephedrone is the first cathinone risk assessed and controlled I 170 internet shops selling NPS identified LAT MDP notified

2010

2011

First international forum on NPS in Lisbon | First meeting on wastewater analysis of NPS | Alert on 4-methylamphetamine deaths I 314 internet shops identified | 48 NPS notified

2012 First international conference on NPS in Budapest | 4-Methylamphetamine risk assessed | Alert on 5-IT deaths | National EWS profiles published | 693 internet shops identified [74 MDF notified

5-IT risk assessed I EU enlargement: Croatia joins EWS I Alerts: AH-7921 deaths; 25I-NBOMe poisonings | Online interactive resource on synthetic cannabinoids | B1 NPS notified | 25 200

European Monitoring Centre for Drugs and Drug Addiction

2020

new psychoactive substances in Europe

New risk assessment operating guidelines | Isotonitazene is the first benzimidazole opioid risk assessed and controlled I MDMB-4en-PINACA and 4F-MDMB-BICA risk assessed [Alerts: impact of COVID-19 pandemic on drug markets; low-THC cannabis adulterated with synthetic cannabinoids | 46 NPS notified | 21 200 seizures, amounting to 5.1 tonnes

Selected events from 25 years

of early warning and response to

2021

3-MMC and 3-CMC risk assessed | Alerts: benzimidazole opioids in fake medicines; risks posed by cannabis edibles | Outbreak of bleeding linked to brodifacoum in Israel I 52 NPS notified I EMCDDA monitoring 884 NPS

2022

EMCDDA celebrates 25 years of early warning and response to NPS in Europe EU control measures on 3-MMC and 3-CMC adopted

2015

2017

MDMB-CHMICA is the first synthetic cannabinoid controlled | Alert increase in carfentanil seizures and deaths | Acryloylfentanyl, furanylfentanyl, AB-CHMINACA, ADB-CHMINACA, 5F-MDMB-PINACA, CUMYL-4CN-BINACA, 4F-iBF, THF-F and carfentanil risk-assessed | 51 NPS notified

2018

amounting to 4.1 tonnes

2019

New EWS operating guidelines |

Alerts: flualprazolam, etizolam |

benzimidazole opioid notified [

Working arrangements with EU

New EDND launched |

Isotonitazene is the first

agencies: ECHA, EFSA I

53 NPS notified

New legislation strengthens the EWS and brings faster response to NPS: Regulation (EU) 2017/2101 and MDMB-CHMICA is the Directive (EU) 2017/2103 enter into first synthetic cannabinoid force | Working arrangements with EU agencies: ECDC, EMA, Europol | risk assessed | Alerts ocfentanil sold as heroin; Methoxyacetylfentanyl and cyclopropylfentanyl risk assessed | acryloylfentanyl deaths | MDA 19 (BZO-HEXOXIZID) Alerts: fentanils in fake medicines; notified | 66 NPS notified risk of occupational exposure to 146 000 seizures fentanils; CBD e-liquids adulterated with synthetic cannabinoids [amounting to 3.2 tonnes 55 NPS notified | 33 600 seizures,

Toxicovigilance, signal management, open source information monitoring and risk communication systems established | Acetylfentanyl is the first fentanil causing EU concern | a-PVP risk assessed | Alert: 'Mocarz' mass poisoning by synthetic cannabinoids | BZP mephedrone, 25I-NBOMe. AH-7921, MDPV controlled internationally | 98 NPS notified | 34 200 seizures, amounting to 4.6 tonnes

Cooperation on NPS strengthened with World Health Organization and United Nations Office on Drugs and Crime I Turkey joins EWS I AH-7921 is the first opioid risk assessed and controlled [MDPV, 25I-NBOMe, methoxetamine, MT-45, 4.4'-DMAR risk assessed I Alert: MDMB-CHMICA poisonings | 101 NPS notified

Early Warning and Outbreaks, Lx Addictions, 2022

THE PROBLEM OF COMPLEXITY

COMPLEX SUBSTANCES

Unstable and fluid

Mutating and multiple

Masked and smart

Less traceable

The object of 'substance' is challenged

COMPLEX SYSTEMS

Fluid and dynamic markets

Fast expanding and virtual

Technological development

Globalisation

Phamaceuticalisation

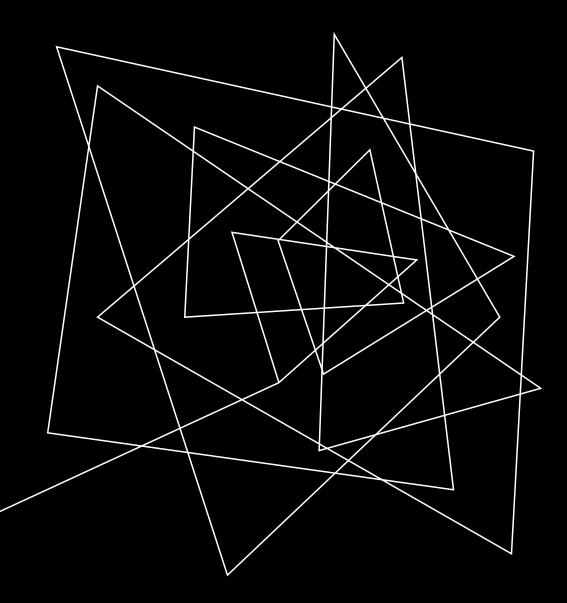
"More challenging to disrupt" 1

EARLY WARNING PROBLEMS

"Traceable substances have now dissolved in an ecology of interchangeable molecules."²

"What is new is the size, reach, and **complexity** of the contemporary market in new substances."

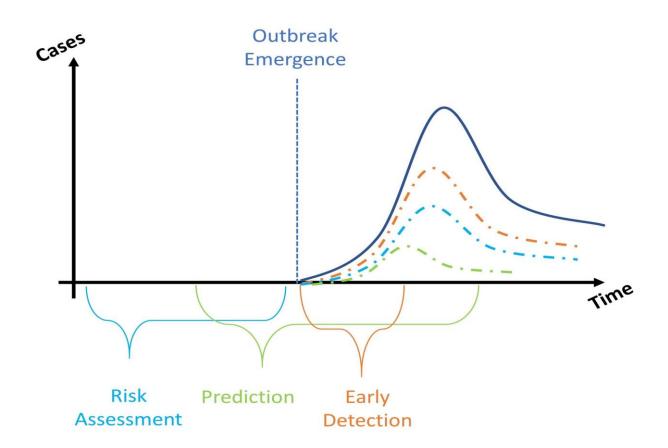
Data "limited and lagged".⁴ Responses have "long delays",⁵ and "reactive rather than pre-emptive".⁶



SEEING DIFFERENTLY

- Beyond substance
- Beyond the local
- Beyond the near and now
- Seeing ahead
- Seeing in *long-view*
- Seeing ecologically
- **Time** stretching the focal point
- Space broadening the field of vision

THE PROMISE OF PREDICTION



"Investing in prediction and in creating the datasets needed to enable it will help us manage the overdose crisis through pre-emptive action."

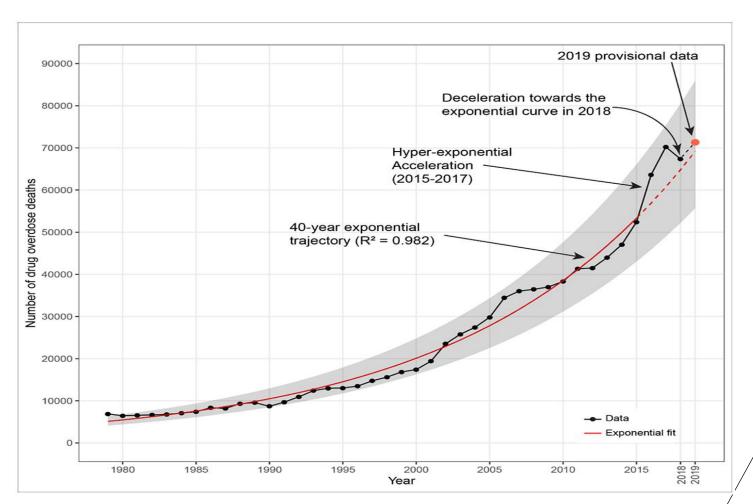
"Anticipating such threats requires a strong surveillance infrastructure and the development of forecasting tools."

PREDICTION AS PREVENTION

- A short-term empirically grounded forecast
- In pandemics, usually restricted to a few weeks
- In overdose outbreaks, a year ahead based on last year
- o "Predict to Prevent": Borquez, Martin, Marks at UCSD
 - detections in supply link to subsequent overdose outbreak
 - retrospective analyses make overdose predictable next year
 - models now predict future outbreaks as early warning
 - the focus is 'emergency', the 'local', and 'rapid response'
- Prediction as 'temporal cut', and as 'ecological cut'

"Most prediction studies examine timescales of one year or less, which is justified given the urgent need for guidance to prevent further overdose."

OVERDOSE IN EPIDEMIOLOGICAL LONG-VIEW



"Overdose deaths in the United States have been tracking along a dismayingly predictable exponential growth trajectory for more than four decades."

"A more recent manifestation of an ongoing longer-term process".1

"A purely statistical observation, with no clear evidence for how and why".1

THE PROMISE OF FORESIGHT

- "It does not aim to predict the future [...] but to help us build it. It invites us to consider the future as something that we can create or shape, rather than as something already decided".1
- "An ambition to be better prepared, to engage with challenges proactively, to respond better"; "to provoke imagination, to think beyond today's reality to a better tomorrow, and to take active steps to get there".²
- Speculation within the "shadow of probabilities".3

Key features:

- Horizon scanning of emerging drivers and signals of change
- Scenario development narratives of plausible and possible future/
- Action planning how to get to the futures preferred

"clues from measurable trends"

"thinking creatively about... possibilities"4





Foresight approaches in global public health



How to run a trends workshop
An EMCDDA foresight toolkit
for the drugs field



What will you find in this toolkit?

Introduction: Why this toolist was created, and how it can be used to the second of th

SPECULATING OVERDOSE IN LONG-VIEW

Two prime narratives in how science performs overdose causation...

DEATHS OF DESPAIR¹

A half-century of 'deindustrialization'
Entangling un/under-employment
Reduced pay and economic capital
Weakened unions and social protections
Precarious labour linked to work injuries
Weakened social capital and support
Increased stress and ontological insecurity
Conditions create demand for pain relief

DEATHS OF SUPPLY²

Three decades of 'pharmaceuticalisation'

Tectonic shifts in opioid prescribing for pain relief

Pharma marketing and influence

Weak regulation and oversight in opioid prescribing

Opioids intersect with heroin, as heroin market expands

Fentanyl, cheaper and stronger, enters the opioid

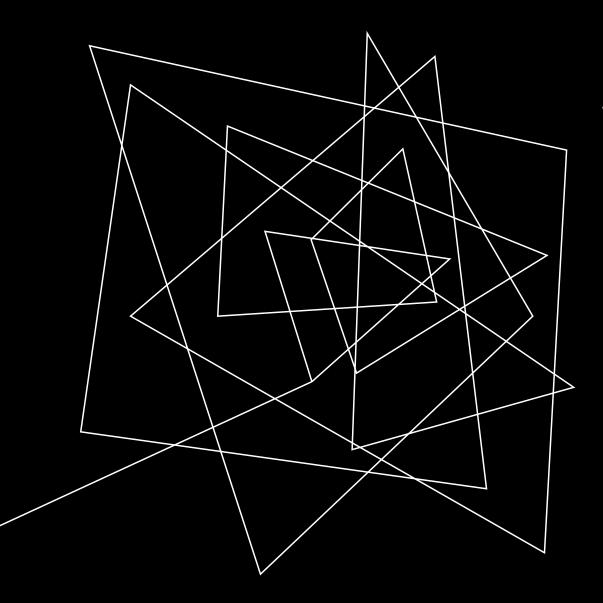
market

SPECULATING OVERDOSE IN LONG-VIEW

Performing narratives of causation: The example of "one-sided class war"

POST-WAR UPSTREAM USE **OVERDOSE** PAIN LABOUR Pain relief Deaths of despair **Economic** Workplace injury Weakened unions recession Psychic pain Opioid prescription Deregulated work Unemployment Community Heroin Corporate profit Less worker power despair Fenantyl Neoliberalism Less support for Weakened support Weakened unions Pill pushing by solidarity Underfunded corporations social and education **Deregulations** enabling profit over welfare

[&]quot;Items on the left seem to contribute causally to items to their right. A degree of reverse causation and of causal influence on items higher or lower also seems to take place"



SEEING DIFFERENTLY

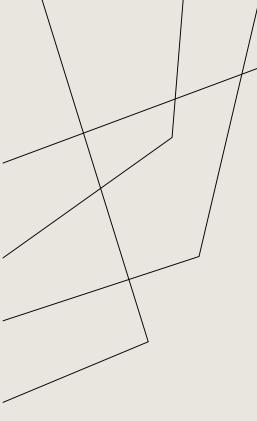
Slow Violence

"By slow violence I mean a violence that occurs **gradually** and out of sight, a violence of **delayed destruction** that is **dispersed across time and space**, an attritional violence that is typically not viewed as violence at all.

Violence is customarily conceived as an event or action that is immediate in time, explosive and spectacular in space, and as erupting into instant sensational visibility.

We need, I believe, to engage a different kind of violence, a violence that is neither spectacular nor instantaneous, but rather incremental and accretive, its calamitous repercussions playing out across a range of temporal scales."

Rob Nixon, 2011: 2



TWO PROPOSALS

1: Ecological warning

- Resist the temporal 'cuts' that 'outbreak' makes
- Make early warning 'long-view' and 'ecological'
- Reach beyond the recent past, proximal and short-term

Design 'ecological' and 'long-view' indicators of outbreak

2: Speculative intervention

- Speculate as well as detect and predict
- Move out of the 'shadow of probabilities'
- Move beyond the limits of 'evidence-based' empirics
- Incorporate multiple forms of expertise
- Deliberate on futures as intervention, not only as preparedness
- Invite radical alternatives, not mere extensions of the present

Design speculative exercises as interventions Study how Foresight works in practice



THANK YOU

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