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

PROPOSED PROGRAMME OF WORK IN EPIDEMIOLOGY FOR 1995

Richard Hartnoll

OBJECTIVE

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. ~~XXXXXXXX~~ This information is intended to help provide them with an overall view of the drug and drug addiction situation when, in their respective areas of competence, they take measures or decide on action (Article 2).

In 1995, the objective will be to lay the foundations for the longer term work programme. This will include establishing a coherent framework and working methods; agreeing priorities and goals; 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 meets high standards in terms of scientific, technical and ethical quality.

CONTENTS

- Objective
- Information Needed
- Sources of Information
- Tasks
 - preparatory work
 - A. Collect and analyze existing data
 - B. Improve data ~~with~~ comparison methods
 - C. Dissemination of data
 - D. Cooperation. 1995

Minimum Staff to Start Epidemiology Programme



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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'

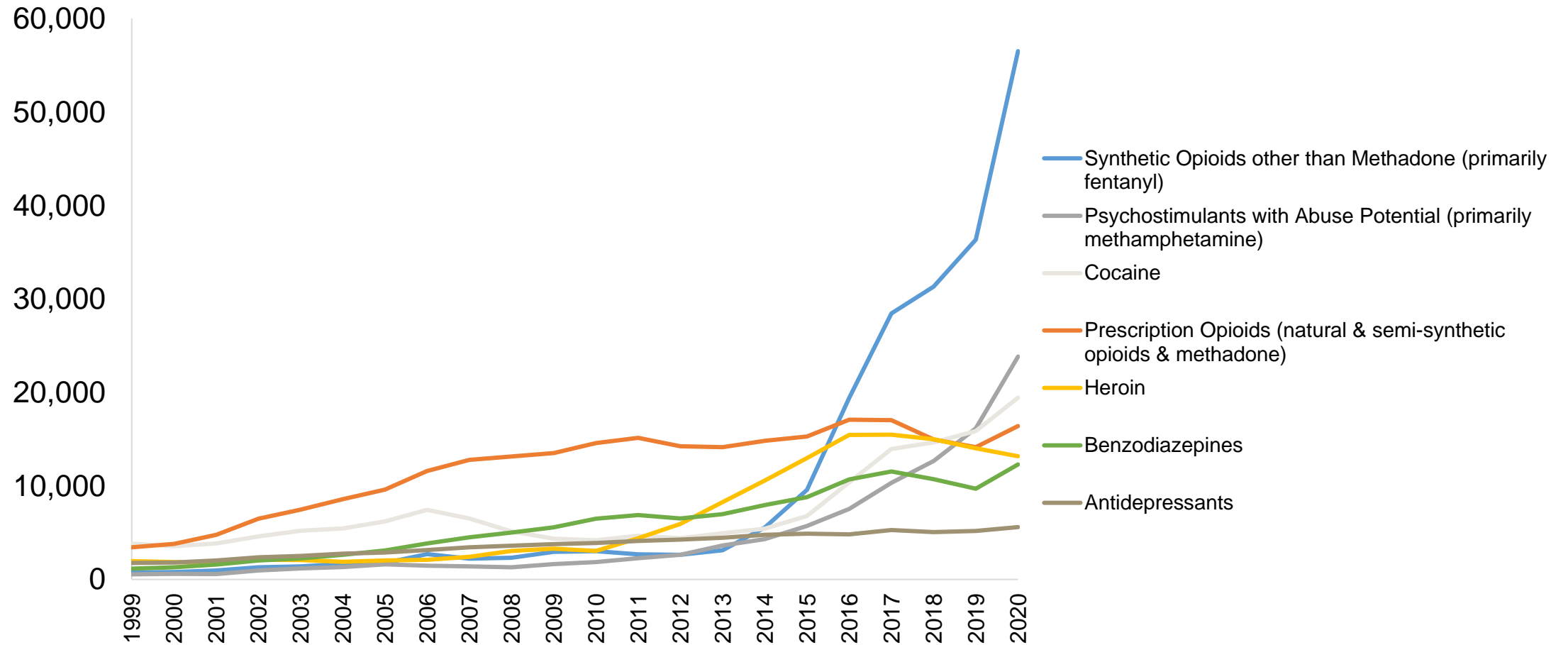
Opioid overdose outbreak

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

- 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.”¹

”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.”³

CONTROL

“One of the reasons behind the increase in the fentanils is that **they are not controlled** under the United Nations drug control conventions.”¹

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?
- 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*

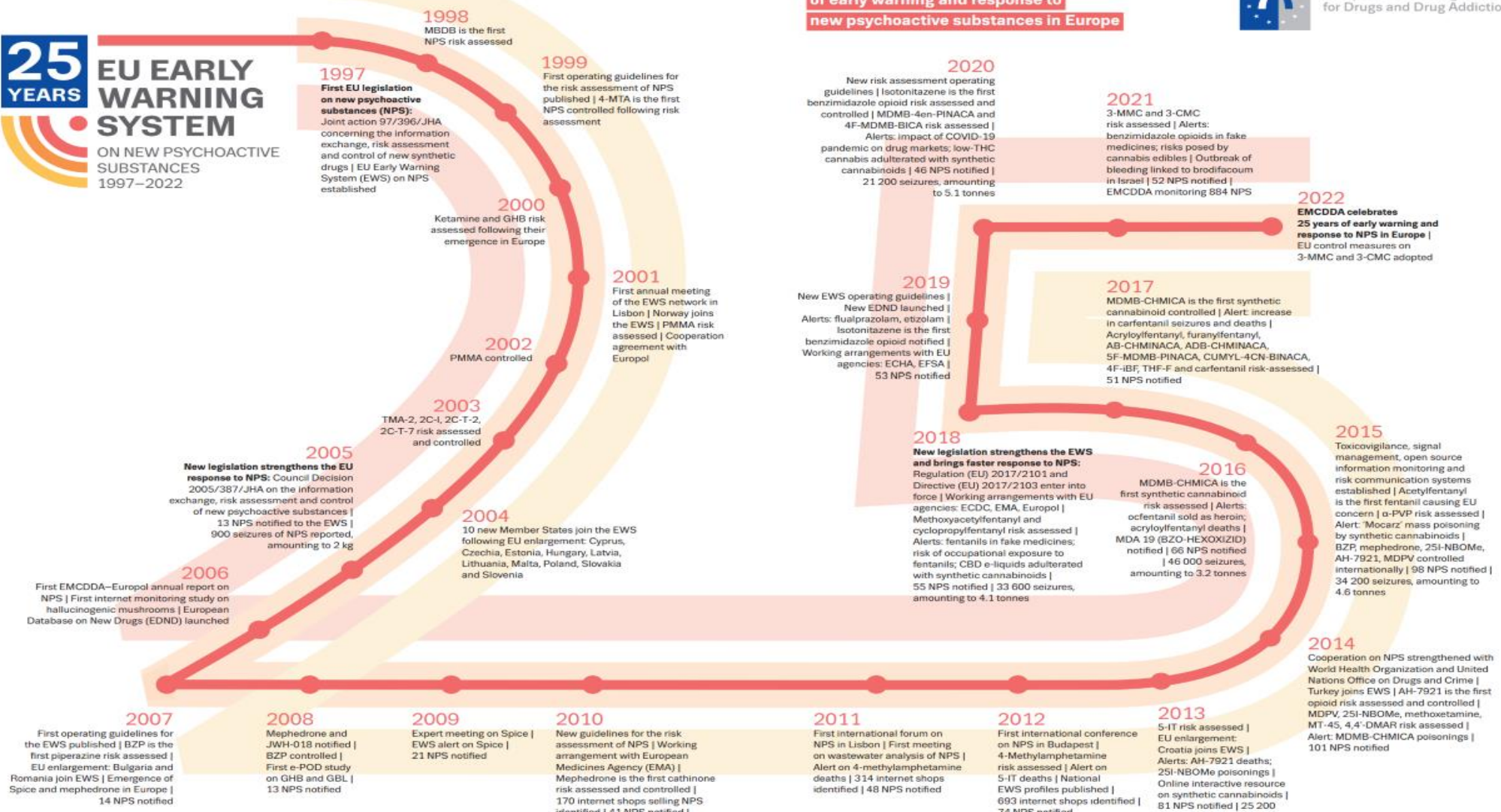
*“The governing nexus of health security preparedness has the potential not just to harm but to **produce events themselves.**”¹*

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

25 YEARS

EU EARLY WARNING SYSTEM ON NEW PSYCHOACTIVE SUBSTANCES

1997–2022



Selected events from 25 years of early warning and response to new psychoactive substances in Europe



European Monitoring Centre for Drugs and Drug Addiction

THE PROBLEM OF COMPLEXITY

COMPLEX SUBSTANCES

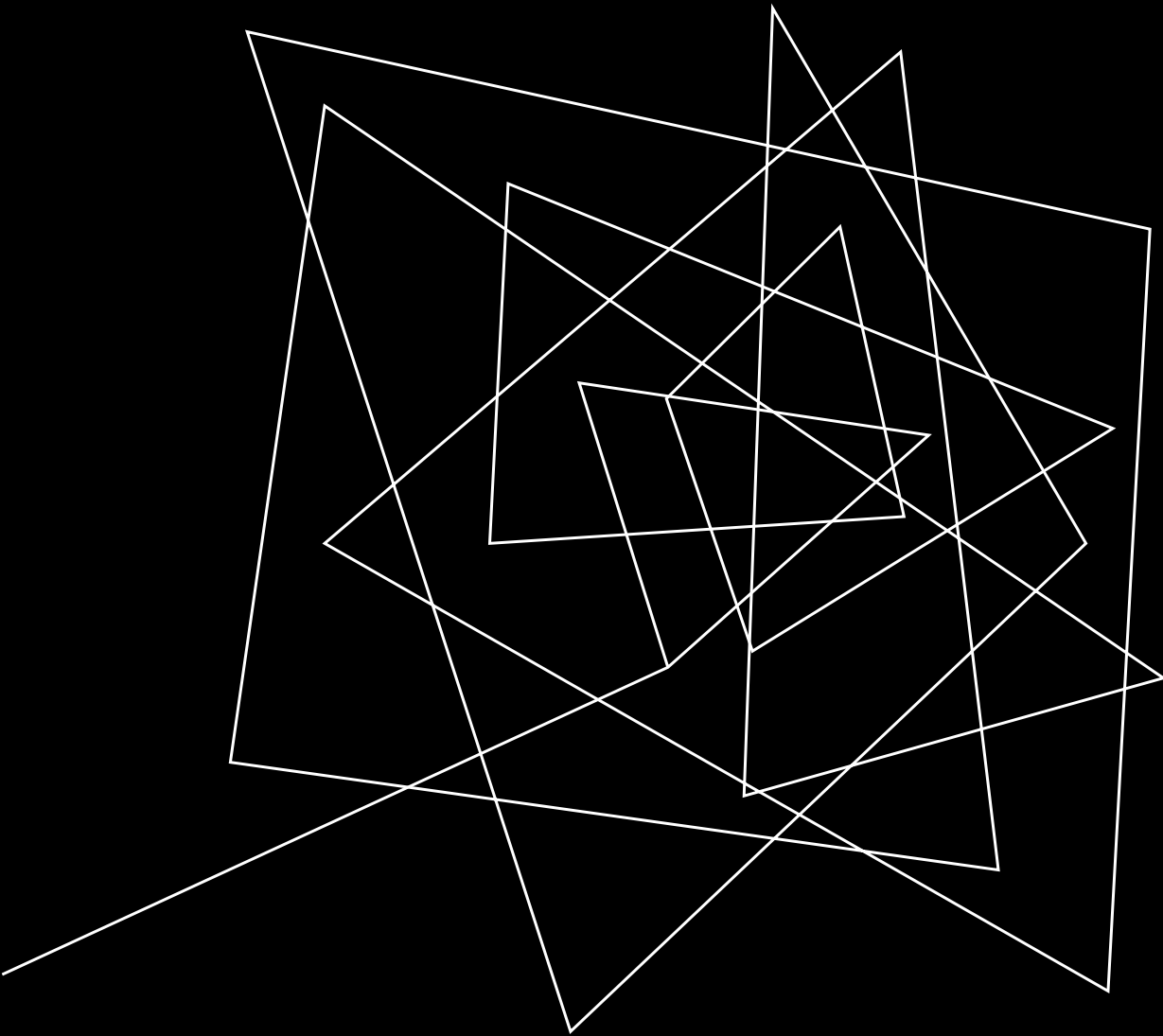
Unstable and fluid
Mutating and multiple
Masked and smart
Less traceable
The object of 'substance' is challenged

COMPLEX SYSTEMS

Fluid and dynamic markets
Fast expanding and virtual
Technological development
Globalisation
Pharmaceuticalisation
"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."³
Data "**limited and lagged**".⁴
Responses have "**long delays**",⁵ and "**reactive** rather than pre-emptive".⁶



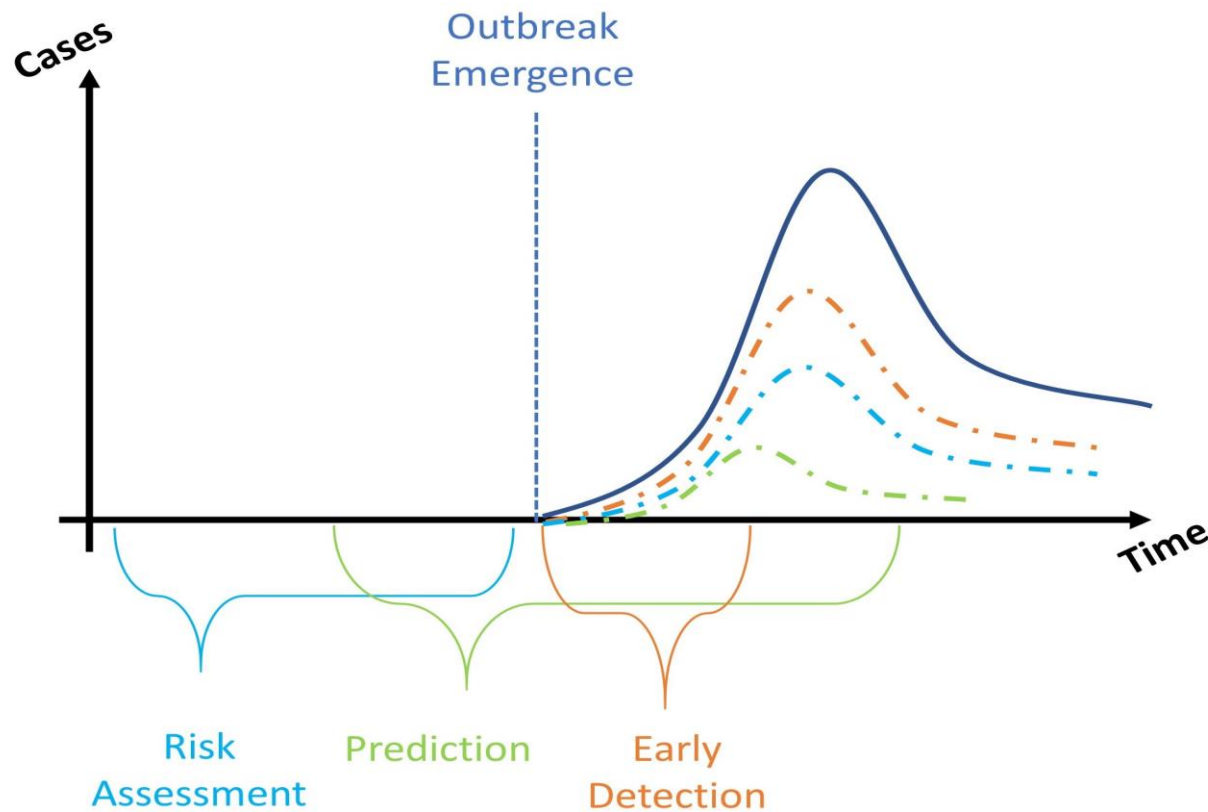
SEEING DIFFERENTLY

- 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.”¹

“Anticipating such threats requires a strong surveillance infrastructure and the development of forecasting tools.”²

Marks, C., Carrosco-Escobar, G., Carrasco-Hernandez, R., Johnson, D., Ciccarone, D., Strathdee, S. A., Smith, D., Borquez, A. (2021). Figure shown with permission.

[1] Jalal and Burke, 2022; [2] Marks et al., 2021.

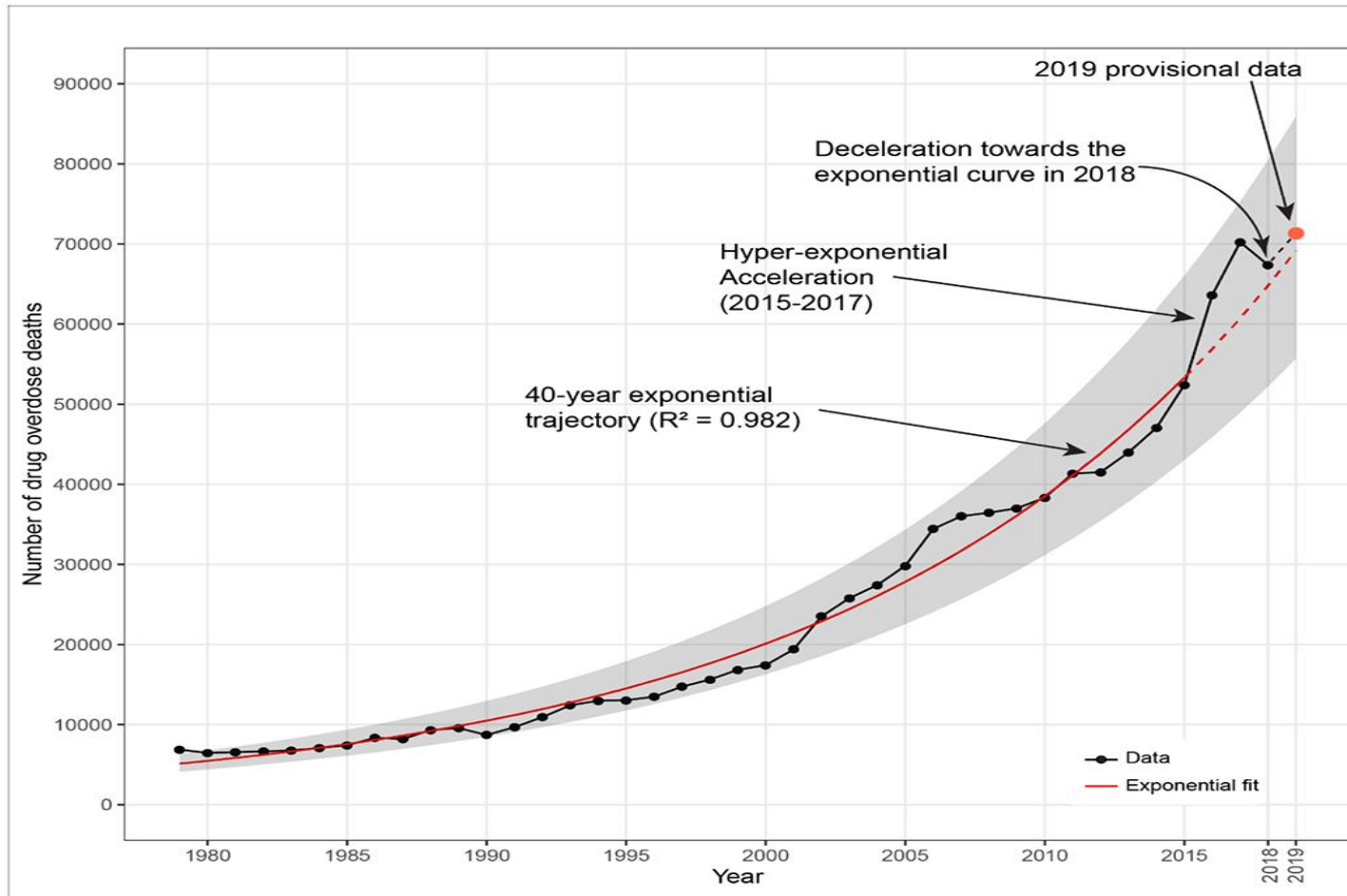
PREDICTION AS PREVENTION

- A short-term empirically grounded forecast
- In pandemics, usually restricted to a few weeks
- In overdose outbreaks, a year ahead based on last year

- “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.”¹

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.”¹

“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

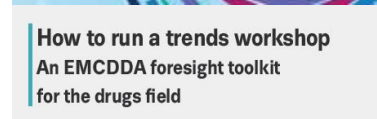
- “It does not aim to predict the future [...] but to help us build it. It invites us to **consider the future as something that we can create or shape**, rather than as something already decided”.¹
- “An ambition to be **better prepared**, to engage with challenges proactively, to respond better“; “to 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



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

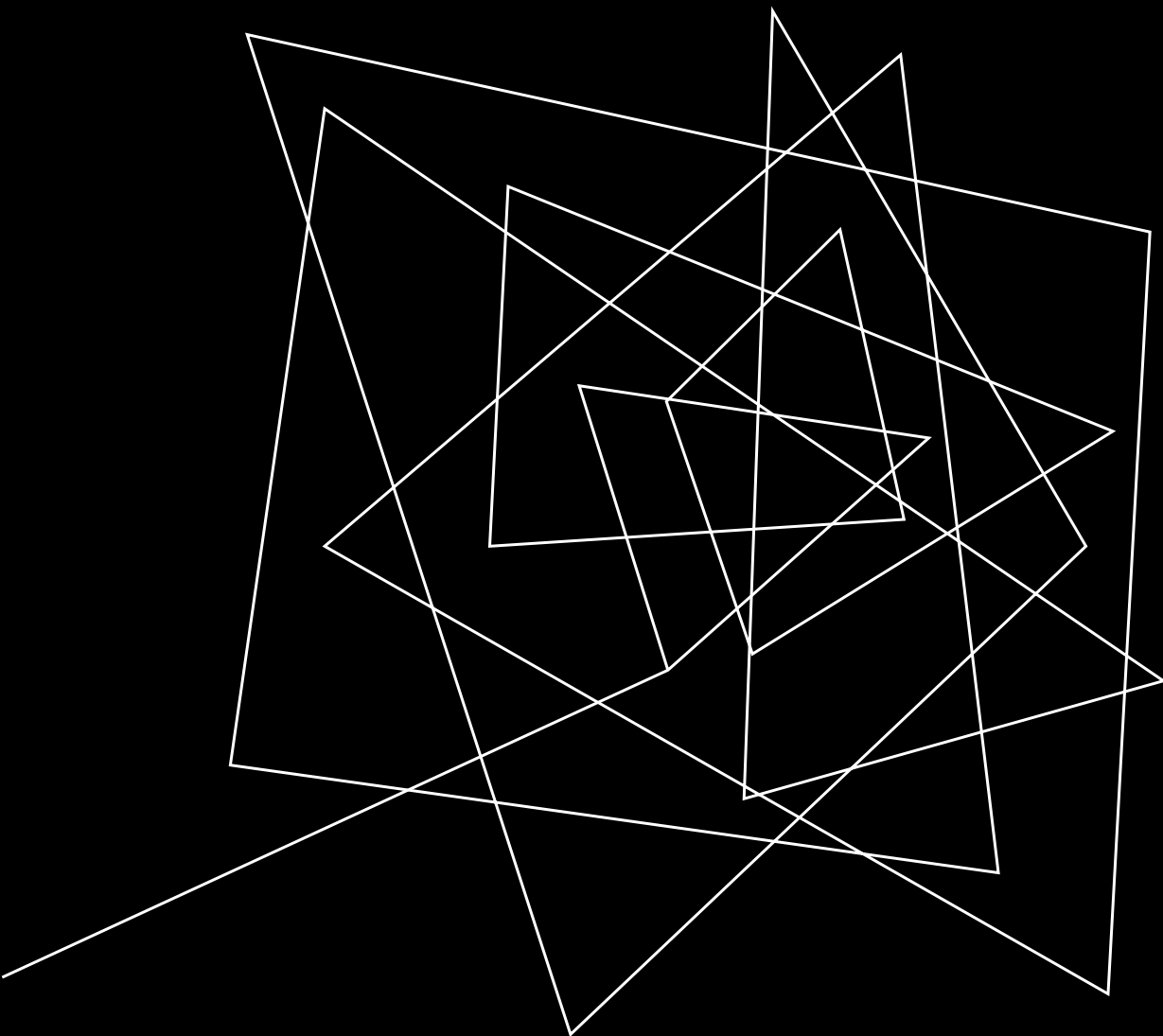
Three decades of 'pharmaceuticalisation'
Tectonic shifts in opioid prescribing for pain relief
Pharma marketing and influence
Weak regulation and oversight in opioid prescribing
Opioids intersect with heroin, as heroin market expands
Fentanyl, cheaper and stronger, enters the opioid market

SPECULATING OVERDOSE IN LONG-VIEW

Performing narratives of causation : The example of “one-sided class war”¹

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

“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”¹



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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