

Was COVID public health's 9/11?



Lessons from national intelligence after 9/11

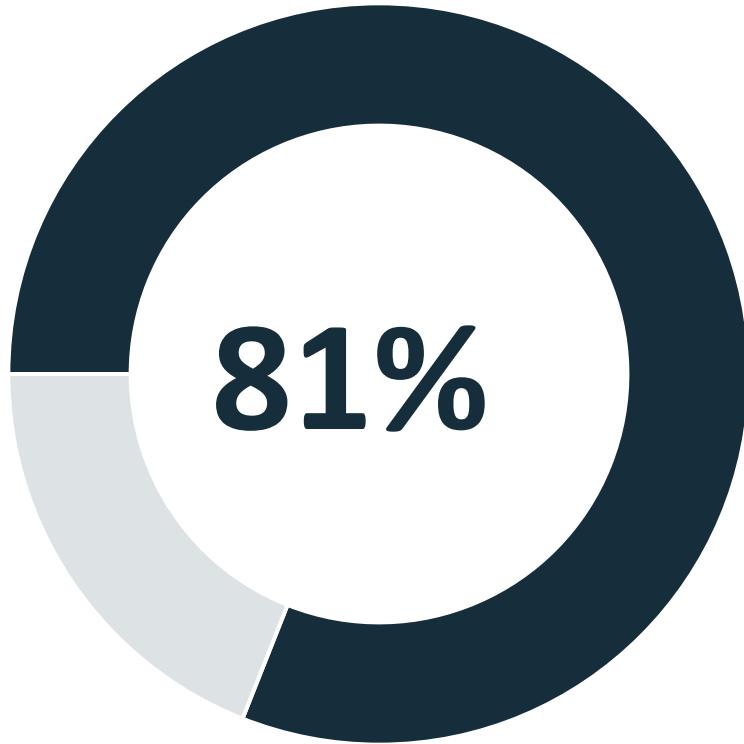
This Was My “Listen” and “Act” Life Before Healthcare

Strategic Air Command,
underground command post

“To Err is Human. To Forgive is
Not SAC Policy.”



Despite criticisms, Public Health did something right



270.2 million people

received at least one
COVID-19 vaccine dose

U.S. population, all ages
As of May 2023

The Arc of Today's Discussion

1 The psychology of data-informed decisions

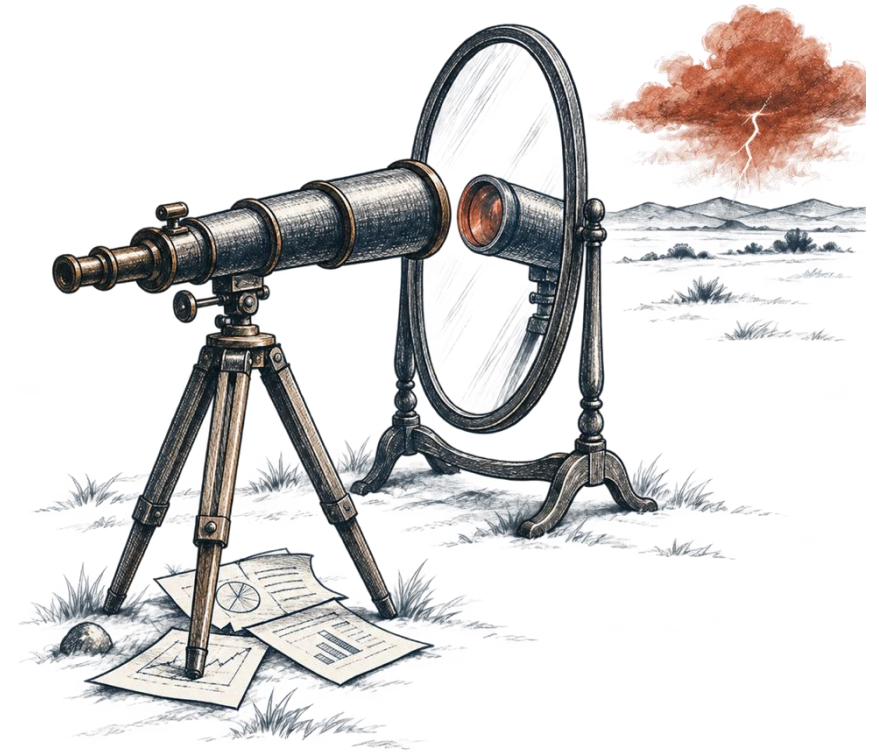
2 Intelligence reform after 9/11



What should public health borrow?

My assertions

- 1 Modernizing yesterday's data can leave us blind to tomorrow's threat.
- 2 "Follow the science" does not tell us whose risks, livelihoods, and freedoms should take priority.
- 3 Risk Analysis is distinct from Risk Management. The former is about objective data; the latter is about subjective policy.



Willingness to Trust

The human conditions for listening

Believability

Are you honest and transparent?

Relatability

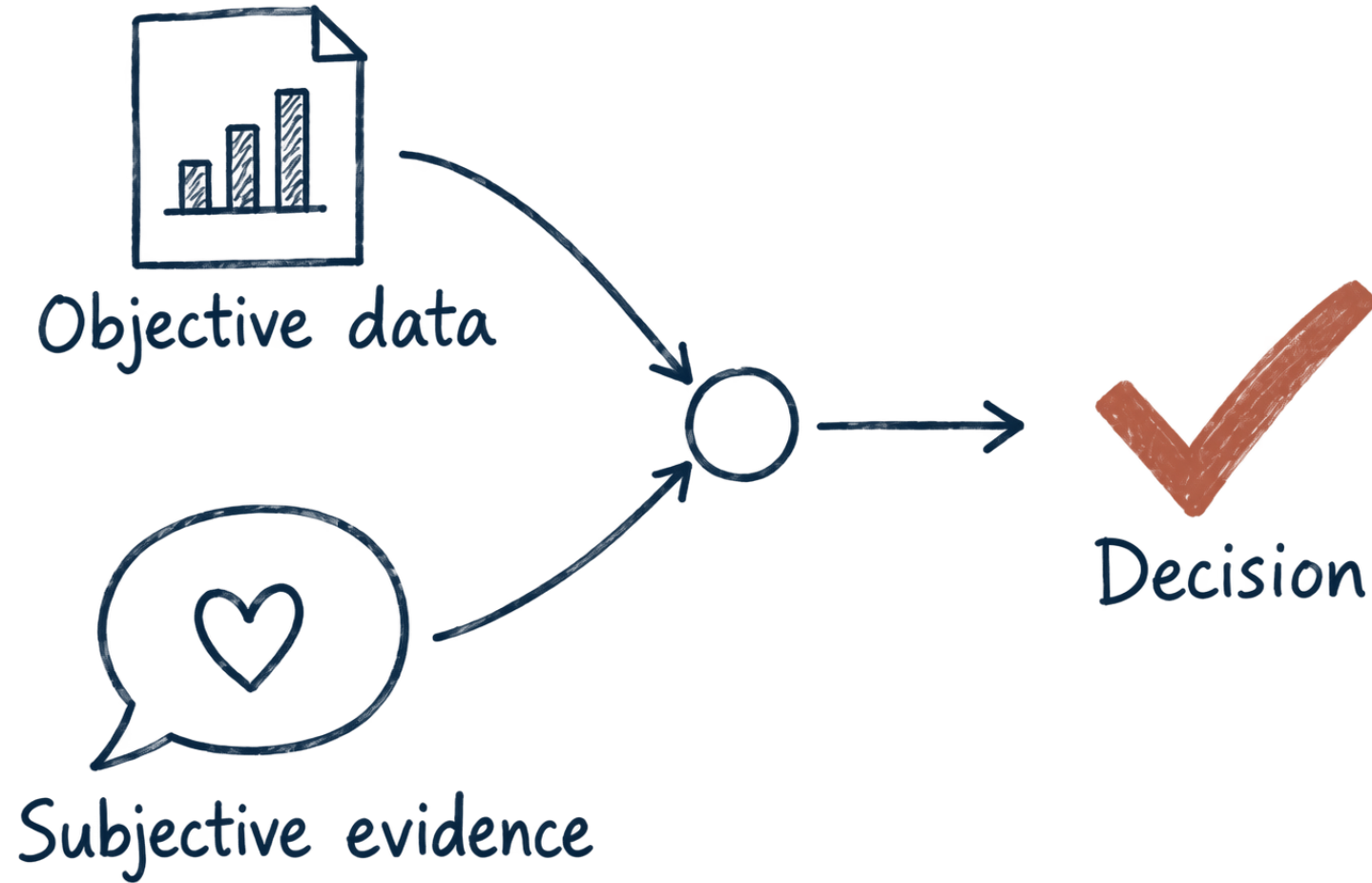
Do you understand me and my situation?

Credibility

Do you bring expertise that I value?



Data informs the decision. Human judgment makes it.



Risk analysis vs risk management

COVID hypothesis: The boundary between evidence and policy became blurred.

Function	Risk analysis	Risk management
Defense	Intelligence analysts assess threats and likely effects of responses.	Civilian leaders / commanders decide. Military forces execute.
Public health	Scientists assess disease risk and likely intervention effects.	Authorized leaders choose measures. Health agencies / partners implement.

Risk Management: Meeting people where they are...

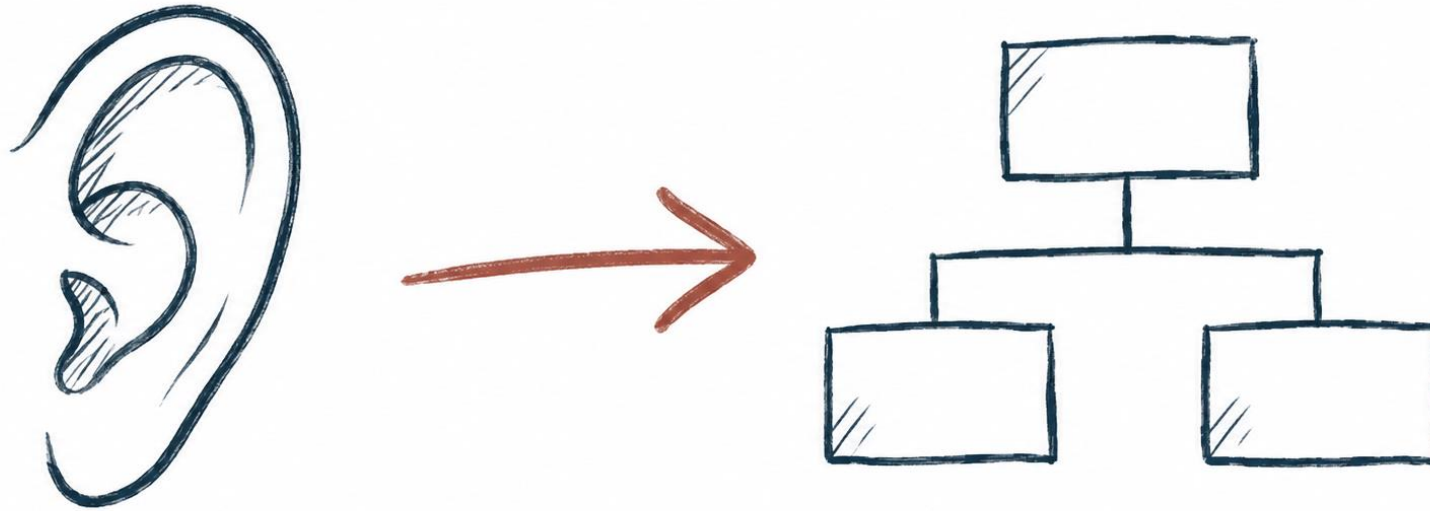
$$\text{Risk} = \text{Probability} \times \text{Consequence}$$

“What’s the probability of me being infected AND what’s the consequence?”

Healthcare tends to assume worst case for either or both, and for everyone, often leading to iatrogenic results

How do we build institutions that listen?

Lessons from national intelligence after 9/11



What 9/11 exposed and changed

The Commission identified failures of imagination, policy, capabilities, and management.

Dimension	Reform response
Organization	DNI and cross-agency integration
Culture	A stronger expectation of information sharing
Technology	Connections across fragmented information systems; new technology
Legislation	The Intelligence Reform and Terrorism Prevention Act of 2004

US national intelligence: 18 organizations

Director of National Intelligence / ODNI

Community leadership and integration

CIA

Central Intelligence Agency

Military elements

DIA Defense Intelligence Agency
NSA National Security Agency
NGA Geospatial Intelligence
NRO National Reconnaissance
Army intelligence
Navy intelligence
Marine Corps intelligence
Air Force intelligence
Space Force intelligence

Other departments

Energy: intelligence / counterintelligence
DHS: Intelligence & Analysis
Coast Guard intelligence (DHS)
FBI intelligence (Justice)
DEA: National Security Intelligence
State: Intelligence & Research
Treasury: Intelligence & Analysis

Lines show IC coordination. Agencies retain their departmental authorities.

Intelligence leadership coordination

Agencies retain distinct missions, resources, and authorities.

The standing meetings

EXCOM: Executive Committee

DNI chairs agency heads and senior officials.
Advises on shared priorities and capabilities.

DEXCOM: Deputy Executive Committee

Principal deputy DNI chairs agency deputies.
Works through issues supporting EXCOM.

Public health application?

A recurring forum that connects evidence to accountable decisions.

Strategic data acquisition

Start now. The data we need may take years to acquire.

Planning step	Required commitment
1 Future decisions	Define the future threat and the decision it requires.
2 Critical data gaps	Specify missing coverage, precision, and timeliness.
3 Multiyear funding	Assign an owner, budget, milestones, and operations.
4 New collection capability	Acquire data. Fund new technology when needed.
5 Validation and renewal	Test quality and decision value. Update the plan.

Investment includes people, partnerships, sensors, research, and ongoing collection.

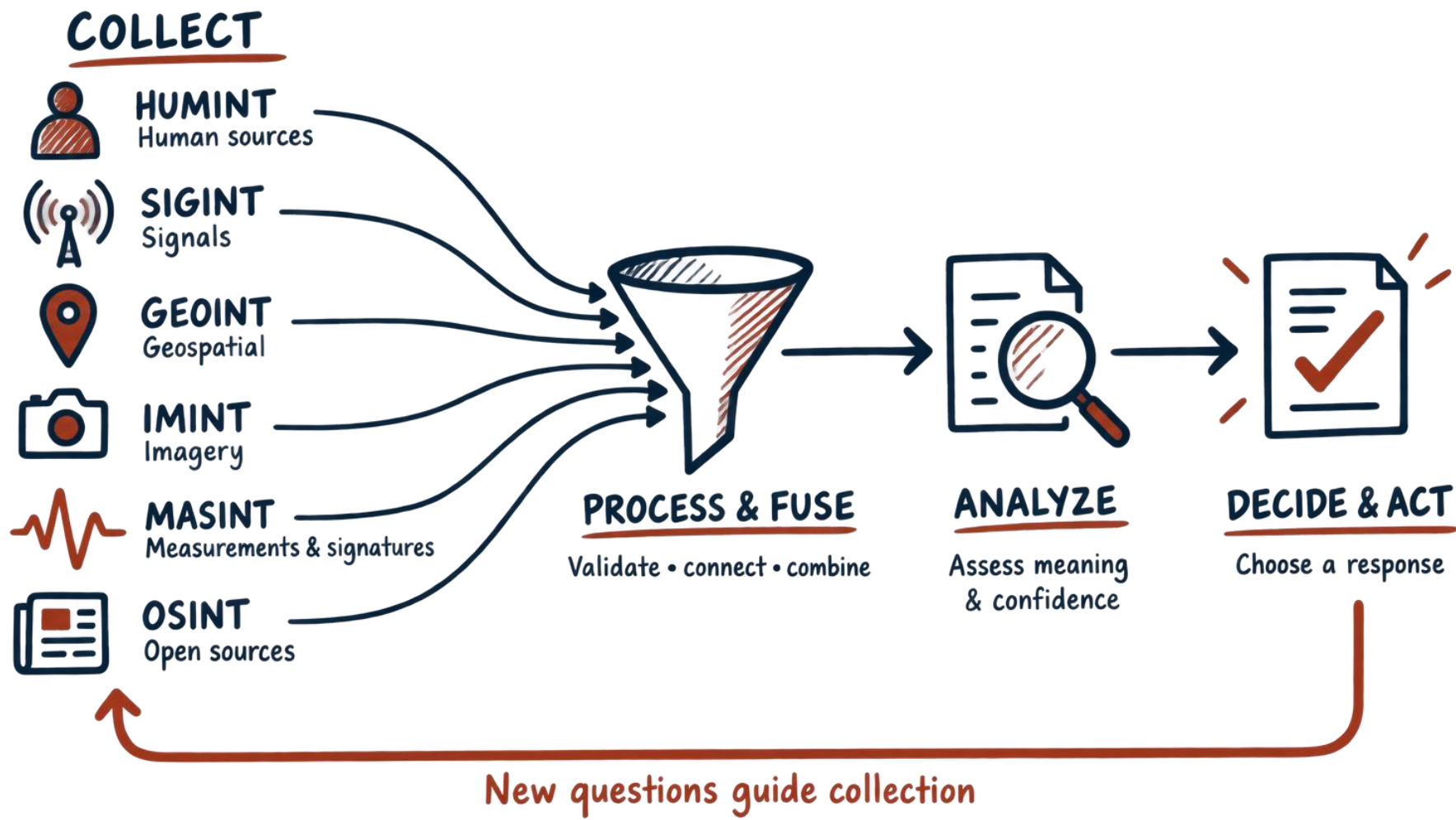
The intelligence collection disciplines

Six basic collection types in ODNI’s public overview

INT	Discipline	What it draws on
HUMINT	Human-source intelligence	People and their observations
SIGINT	Signals intelligence	Intercepted electronic signals
GEOINT	Geospatial intelligence	Imagery and geographic context
IMINT	Imagery intelligence	Images of objects and activities
MASINT	Measurement & signature intelligence	Distinctive physical signatures
OSINT	Open-source intelligence	Publicly available information

Within SIGINT

COMINT Communications ELINT Electronic emissions
FISINT Foreign instrumentation signals, including telemetry



Public health's intelligence disciplines?

Intelligence	Public health equivalent	Familiar examples
HUMINT Human sources	Community listening	Nurses and community workers report what people experience.
SIGINT Electronic signals	Syndromic surveillance	Emergency visits reveal unusual patterns of illness.
GEOINT Geography	Spatial epidemiology (GIS)	Maps connect disease with exposure and access to care.
IMINT Imagery	Remote sensing	Satellite images show heat, smoke, and flooding.
MASINT Signatures	Laboratory and environmental surveillance	Wastewater testing and pathogen genomic fingerprints.
OSINT Open sources	Epidemic intelligence and social listening	News and public posts flag emerging health concerns.

Intelligence data: How reliable is this?

These ratings--this metadata-- accompany intelligence summaries, as a cover sheet

Code	Source reliability
A	Reliable
B	Usually reliable
C	Fairly reliable
D	Not usually reliable
E	Unreliable
F	Cannot be judged

Code	Information credibility
1	Confirmed
2	Probably true
3	Possibly true
4	Doubtfully true
5	Improbable
6	Cannot be judged

In closing...the moral standard for a "Listening System"

Find the truth

Except in math, it's always a mix of objective and subjective evidence.



Find the truth

Tell the truth

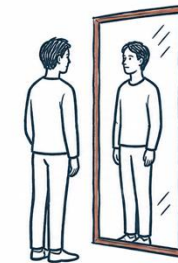
Explain the evidence, the uncertainty, and what it means. Tailor it to the listener.



Tell the truth

Face the truth

In yourself, in your work, and data. Help others face the truth when it's uncomfortable.



Face the truth