



# Air Pollution Journalist Training:

## Effective Use of Data in Reporting

TRAINING OVERVIEW



For more information about organizing a training, contact [environmentalhealth@vitalstrategies.org](mailto:environmentalhealth@vitalstrategies.org)

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## Background

Air pollution is a major global environmental health risk factor that kills approximately 6 million people—mostly from underserved communities in low-and middle-income countries—every year. Though public awareness of air pollution is rising in many countries, major gaps remain between scientific evidence and public awareness of health risks, causes, and solutions. Historically, public awareness and resulting civil society movements have been important drivers of actions by government, businesses, and consumers to address environmental problems. As influencers of public discourse and investigators of complex problems, journalists have a vital role in ensuring that the public is informed and engaged constructively.

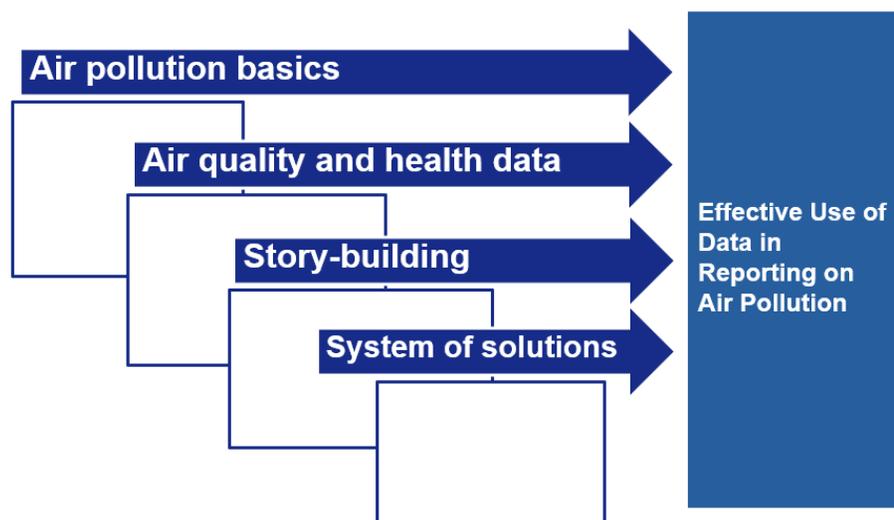
## Training Goals

During this four-day training, journalists will increase their capacity to understand and report on the global air pollution crisis in both global and local contexts. The training focuses on improving journalists' ability to identify, understand, and translate relevant data and public health claims into rich and compelling stories. By the end of the training, participants will be able to:

- Understand the causes, health effects, and scope of the air pollution crisis
- Access and interpret air quality and health data in global and local contexts
- Understand the system of solutions that address air pollution crisis
- Construct thoughtful data-supported stories about the air pollution crisis

These goals have informed the training model modules against which thirteen training sessions are mapped:

- **Air pollution basics** – reviews the characteristics and behaviors of air pollutants and its effects on human health
- **Air quality and health data** – reviews the language and methods scientists use to study and describe air pollution and its related health effects
- **Story-building** – reviews technique with which journalist can incorporate data into their stories
- **System of solutions** – reviews pillars of air quality management from the individuals through global perspectives



## Instructors & Materials

This is a “hands-on” workshop in which journalists participate in exercises, reviewing sources of air quality and public health data, and exploring best practices for locating, interpreting, and using data, journalists build practical skills that they can immediately put into action in reporting on air pollution. Instructors for this training include global and regional experts in air pollutants, health effects of air pollution, air quality management, and communications.

Each journalist will receive a Participant Manual that hosts all exercises, references, and practical guidelines for finding, understanding, and communicating data in air pollution reporting. By the end of the workshop, participants will transform a general story idea into a draft proposal or article that is built on a data-rich foundation.

## Proposed Schedule

All times are approximate, and flexibility is built in for trainers to solicit participants' experiences with given topics.

	Session No.	Session Tittle	Time (min)	
Day 1	0	Introduction and Overview	60	9:00-10:00
	1	Air Pollutants, Sources, and Transport	60	10:00-11:00
		Tea Break	30	11:00-11:30
	2	Health Effects of Air Pollution	90	11:30-13:00
		Lunch	60	13:00-14:00
	3	Why Data Matter	60	14:00-15:00
	4	Air Quality and Exposure	60	15:00-16:00
		Tea break	20	16:00-16:20
	5	Sources of Air Quality Data	60	16:20-17:20
	Wrap-up	10	17:20-17:30	
Day 2		Preview	10	9:00-9:10
	6	Health Data	90	9:10-10:40
		Tea break	20	10:40-11:00
	7	Sources of Health Data	90	11:00-12:30
		Lunch	60	12:30-13:30
	8	Data Visualizations	90	13:30-15:00
		Tea break	20	15:00-15:20
	9	Social Media	60	15:20-16:20
		Workshop your story: Explore the Data	30	16:20-16:50
	Wrap-up	10	16:50-17:00	
Day 3		Preview	10	9:00-9:10
	10	Finding the Story in the Data	60	9:10-10:10
	11	Writing Effective Stories	60	10:10-11:10
		Tea break	20	11:10-11:30
	12	Exposure Reduction	90	11:30-13:00
		Lunch	60	13:00-14:00
	13	Air Quality Management & Source Reduction	60	14:00-15:00
		Tea break	20	15:00-15:20
		Q&A	60	15:20-16:20
	Wrap-up	10	16:20-16:30	
Day 4		Travel to Pollution Ctrl Dept	45	9:15-10:00
		Field trip – Pollution Ctrl Dept	120	10:00-12:00
		Return from Pollution Ctrl Dept	60	12:00-13:00
		Lunch	60	13:00-14:00
		Trip recap & Workshop your story	90	14:00-15:30
		Tea break	30	15:30-16:00
		Workshop your story	60	16:00-17:00
		Wrap-Up and Evaluations	30	17:00-17:30
Evening	Farewell reception	45	18:00-18:45	

## **MODULE 1: AIR POLLUTION BASICS**

### **Session 1: Air Pollutants, Sources, and Transport**

**Objectives:** By the end of the session, participants will be able to:

- Identify the common components of air pollution
- Understand the distinctions between outdoor, agricultural, traffic-related, and household air pollution
- Understand the patterns of transport of air pollutants in the environment

**Purpose:** To provide a broad background on air pollution and describe how air pollutants enter and behave in the environment. To introduce the concept of air pollution source apportionment.

### **Session 2: Health Effects of Air Pollution**

**Objectives:** By the end of the session, participants will be able to:

- Understand the global scope of the health effects of air pollution
- Describe the health impacts of air pollution exposure over the life course
- Identify populations that are especially susceptible to negative health effects

**Purpose:** To provide a background on the adverse effects of air pollution exposure on human health and emphasize air pollution's status as a major global and local risk factor, to introduce the concept of attributable risk.

## **MODULE 2: AIR QUALITY AND HEALTH DATA**

### **Session 3: Why Data Matter**

**Objectives:** By the end of the session, participants will be able to:

- Identify how the media industry is changing
- State the role data play in a good story
- Identify why data are meaningful
- State how using data contributes to a culture of accountability

**Purpose:** To show journalists how using data in news stories about the air pollution crises can strength and enrich the story, to describe ways data can be used, and how to make data meaningful

### **Session 4: Air Quality and Exposure**

**Objectives:** By the end of the session, participants will be able to:

- Identify and define terms used in air quality and exposure measurement
- Describe the common methods employed to measure air quality and human exposure to air pollution
- Describe the implications of common patterns air quality measurements and populations exposed

**Purpose:** To familiarize journalists with terminology relating to data that is used in air pollution reporting.

### **Session 5: Sources of Air Quality Data**

**Objectives:** By the end of the session, participants will be able to:

- Identify limitations of air quality data sources
- Access and interpret widely available global and national air quality data sources
- Understand a process to identify missing air quality data

**Purpose:** To teach journalists to distinguish among the major sources of air quality data and discern when is the appropriate time to use each source.

## Session 6: Health Data

**Objectives:** By the end of the session, participants will be able to:

- Identify and define terms used in public health data
- Identify limitations of epidemiological methods used to study air pollution's effects on health
- Analyze a scholarly article
- State the risks of using incomplete or "bad" data

**Purpose:** To familiarize journalists with terms and methods relating to health data that is used in air pollution reporting, to help journalists analyze scholarly articles to ensure they are using credible data appropriately.

## Session 7: Sources of Health Data

**Objectives:** By the end of the session, participants will be able to:

- Access and interpret widely available global and national health data sources

**Purpose:** To teach journalists to distinguish among the major sources of health data and discern when is the appropriate time to use each source.

## Session 8: Data Visualizations

**Objectives:** By the end of the session, participants will be able to:

- Read and extract information from common visual presentations of PH data (tables/charts/graphs)
- Understand the value of infographics
- Explore the concept of storytelling with images

**Purpose:** To guide journalists understanding and employing data visualizations in reporting.

## **MODULE 3 – STORY-BUILDING**

### **Session 9: Social Media**

- Objectives:** By the end of the session, participants will be able to:
- Review guidelines for producing effective social media posts
  - Create a social media post using public health data

**Purpose:** To give journalists practice in writing a tweet that references public health data

### **Session 10: Finding the Story in the Data**

- Objectives:** By the end of the session, participants will be able to:
- Know how to write a story based on a fact, trend, comparison, correlation
  - Find the stories hidden in huge data sets

**Purpose:** To show journalists how they can find a story within a data set by looking for patterns, such as trends, and making comparisons, and to show them how to create a data-driven story with context and background.

### **Session 11: Writing Effective Stories**

- Objectives:** By the end of the session, participants will be able to:
- Identify the do's/don'ts when story telling with data
  - Incorporate the patterns public perception into public health journalism

**Purpose:** To show journalists how to write effective data-driven story

## **MODULE 4: A SYSTEM OF SOLUTIONS**

### **Session 12: Exposure Reduction**

**Objectives:** By the end of the session, participants will be able to:

- Describe the short-term responses to air pollution events
- Evaluate public health claims

**Purpose:** To sensitize journalists to the inherent limitations of the short-term exposure reduction techniques that are commonly employed.

### **Session 13: Air Quality Management & Source Reduction**

**Objectives:** By the end of the session, participants will be able to:

- Understand the air quality management theory
- Describe the long-term solutions to the air pollution crisis, as well as their requirements and challenges

**Purpose:** To provide journalists with a background on the classes of long-term solutions that address the air pollution crisis

## **WORKSHOP YOUR STORY**

Workshopping sessions are meant for you to explore the resources and concepts covered in this training to develop a pitch for your story. Use your pitch to seek feedback from data experts and your peers.

Your story pitch should include:

- General story idea
- Data sources
- Potential experts to contact or quote
- Rationale for why this story is important