# RISK COMMUNICATION AND COMMUNITY ENGAGEMENT

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#### PLASTIC AND RISK TO HUMAN AND ENVIRONMENTAL HEALTH

# Plastics in the environment

Chemical stressor

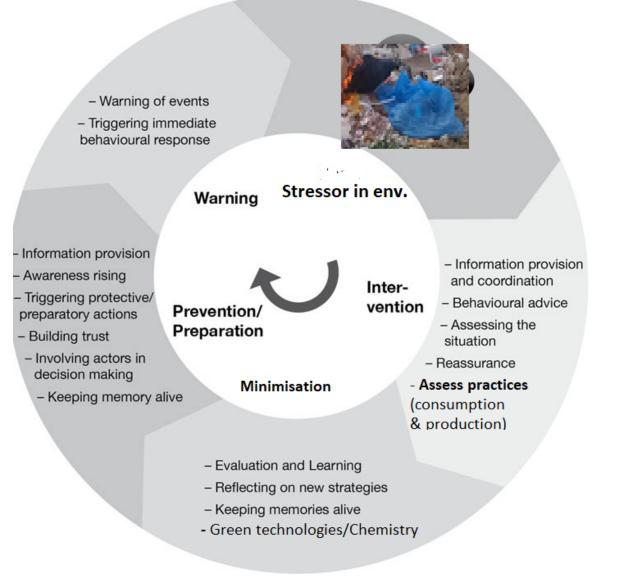
The Vector effect

Physical stressor





#### WHY IS RISK COMMUNICATION IMPORTANT IN THE CONTEXT OF PLASTIC POLLUTION?



Adapted from Hoppner et al 2012

## **ENSENTIALS OF RISK COMMUNICATION**

#### Transparency and credibility

Two-way dialogic engagement



AIMS Environmental Science, 6(5): 326 –340. DOI: 10.3934/environsci.2019.5.326 Received: 07 May 2019 Accepted: 06 August 2019 Published: 14 August 2019

http://www.aimspress.com/journal/environmental

#### Review

#### Improving microplastic research

#### Judith S. Weis\*

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**Abstract:** There has been a virtual explosion of research on microplastics. Every week new articles are published in scientific journals. However, not all of them are original or important. Dozens of papers come out monthly that report the number of microplastic particles found in some water body,



Acknowledge uncertainty

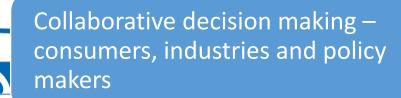
Narrative enactment – avoid sensationalism



Contents lists available at ScienceDirect

Marine Pollution Bulletin

journal homepage: www.elsevier.com/locate/marpolbul



#### Microplastics as vectors of contaminants

Gabriella Caruso

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#### ARTICLEINFO

ABSTRACT

Keywords: Microplastics Pollution by microplastics and antibiotics is an emerging environmental, human and animal health threat. In spite of several studies documenting the widespread occurrence of plastic debris in aquatic ecosystems, research

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POLLUTK

### **RISK COMMUNICATION FOR COMMUNITY CAPACITY BUILDING AND EMPOWERMENT**

• Create knowledge about the presence of plastics in the env.

- potential risk,
- legal and policy position, how to act and take action
- Generate knowledge about values, norms and beliefs

Attite al/m otivational capacities

Knowledge

capacities

Organisation al capacities

- Awareness raising about plastic as hazard and potential risk
- Plastic sector communication skills and establishing trustful relationship with wider society

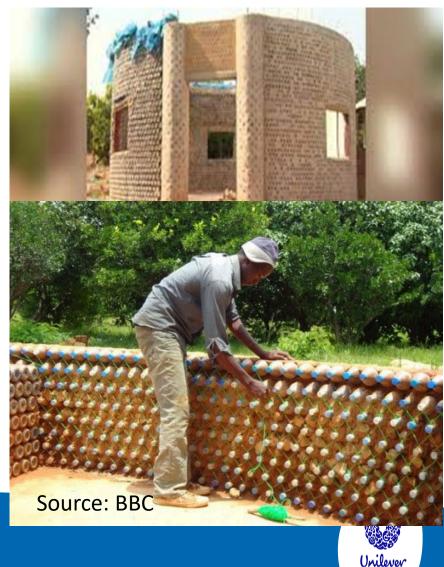


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Community Economic Empowerment – e.g. plastic buildings





Community Economic Empowerment – e.g. plastic supported road construction, incentives, plastic waste taxes?

#### BUSINESSTECH Government wants to use waste plastic in South Africa's road







Social empowerment– social networks, prestige etc



Who is reducing single-use plastic in Makana?

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#### UPDATED 29 June 2020

This is a listing of businesses in Grahamstown and the greater Makana municipal area making an effort to reduce single-use plastic. If you know of others who should be acknowledged, please let us know.

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We'll keep adding as businesses embrace the change.



- Mobilising for environmental protections
- Plastic removal from Grahamstown Rivers







### CONCLUSIONS

- Risk communication is an important aspect of plastic management in the environment
- Communication needs to be two-way dialogue engagement
- Credibility and transparency key
- Plastic waste-based economy for social-economic development





### ACKNOWLEDGEMENTS



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Thank you for listening



