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**[THE CENTRE FOR HUMANITARIAN DATA](https://centre.humdata.org/)**   
**PREDICTIVE ANALYTICS IN HUMANITARIAN RESPONSE**

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| The goal of the OCHA Centre for Humanitarian |  | • Act as a technical translator, ensuring |
| Data is to increase the use and impact of data in | effective communication between modelers |
| humanitarian response. Created in 2017 and based | and forecast producers, and humanitarian/ |
| in The Hague, the Centre includes four workstreams: | development decision makers. |
| data services, including management of the |
| Humanitarian Data Exchange (HDX) platform, data | **2** | Promote the **responsible use of predictive** |
| responsibility, data literacy, and predictive analytics. |  | **analytics** in the sector. |

Predictive analytics involves the analysis of   
current and historical data to anticipate an event or some characteristic of an event (its likelihood, severity, magnitude, or duration). In the context of humanitarian response, predictive analytics includes several modelling methodologies aimed at anticipating humanitarian needs arising from different shocks, including:

• Weather and climate models predicting the   
occurrence and impacts of sudden and slow onset hazards such as droughts, floods, storms;

• [Facilitate the Centre’s](https://data.humdata.org/dataset/2048a947-5714-4220-905b-e662cbcd14c8/resource/76e488d9-b69d-41bd-927c-116d633bac7b/download/peer-review-framework-2020.pdf) **[Peer Review Framework for Predictive Analytics in Humanitarian](https://data.humdata.org/dataset/2048a947-5714-4220-905b-e662cbcd14c8/resource/76e488d9-b69d-41bd-927c-116d633bac7b/download/peer-review-framework-2020.pdf)**   
**[Response](https://data.humdata.org/dataset/2048a947-5714-4220-905b-e662cbcd14c8/resource/76e488d9-b69d-41bd-927c-116d633bac7b/download/peer-review-framework-2020.pdf)**[, which evaluates technical and](https://data.humdata.org/dataset/2048a947-5714-4220-905b-e662cbcd14c8/resource/76e488d9-b69d-41bd-927c-116d633bac7b/download/peer-review-framework-2020.pdf)   
[ethical co](https://data.humdata.org/dataset/2048a947-5714-4220-905b-e662cbcd14c8/resource/76e488d9-b69d-41bd-927c-116d633bac7b/download/peer-review-framework-2020.pdf)ncerns of models; manage a Reviewer Pool of technical and ethical experts.

• Promote data responsibility with how data is shared and used for model development and the application of predictive analytics.

• Support decision makers with understanding uncertainty in projections.

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| • Epidemic models used to better understand the | **3** | **Build capacity** in the humanitarian sector. |
| main risk factors leading to major outbreaks or to |  | • Provide documentation (blogs, impact stories, |
| project epidemic trends; |
| • Analysis aimed at projecting the evolution | technical notes), tools and processes to |
| facilitate the successful adoption of predictive |
| of humanitarian crises based on current and | analytics. |
| historical data; |
| • Create a community of technical actors to share |
| • Other methods that assess the risk and the socio- | best practices and learnings on the application |
| economic impacts of disasters or other shocks. | of predictive analytics in the sector. |

The Centre’s predictive analytics team is focused on increasing the trust and adoption of models to support improved decision making by humanitarian

actors. We do this through the following activities:

• Offer model deep dives, training modules and events on predictive analytics in the sector.

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| |  | | --- | | **1** | | Provide **technical support** to humanitarian | **CONTACT US** |
|  | partners. | Let us know how we can support your work on |
| • Conduct historical analysis, assess available | predictiv[e analytics. Send questio](mailto:centrehumdata%40un.org?subject=)ns or requests by |
| email to **[centrehumdata@un.org](mailto:centrehumdata%40un.org?subject=)**[. Submit your m](http://bit.ly/pa-model-review)odel |
| models and forecasts, and design trigger |
| for peer [review at](mailto:centrehumdata%40un.org?subject=) **[http://bit.ly/pa](mailto:centrehumdata%40un.org?subject=)[-model-review](http://bit.ly/pa-model-review)** or |
| mechanisms for use in anticipatory action |
| [get directly involv](http://bit.ly/pa-reviewer)[ed by joining our Reviewer Poo](http://bit.ly/pa-model-review)l at |
| frameworks. |
| **<http://bit.ly/pa-reviewer>**. |
| • Define potential use cases for predictive | For more information, visit our page on the |
| analytics and develop new models as |
| needed to fill gaps in available forecasts and | [Centre’s website at](https://centre.humdata.org/predictive-analytics/) **[https://centre.humdata.org/](https://centre.humdata.org/predictive-analytics/)** |
| projections. | **[predictive-analytics/](https://centre.humdata.org/predictive-analytics/)**[.](https://centre.humdata.org/predictive-analytics/) |

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