

Doctors Without Borders in the Haiti Earthquake

Google Earth

"If a picture is worth a thousand words, a map can be worth a thousand spreadsheets."

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Background

HAITI EARTHQUAKE, JANUARY 2010 - <u>Doctors Without Borders/Médecins</u> <u>Sans Frontières (MSF)</u> is an international medical humanitarian organization working in nearly 70 countries to assist people whose survival is threatened by violence, neglect, or catastrophe.

Even before the devastating earthquake in 2010, basic healthcare was out of reach for most Haitians. When the earthquake struck on January 12, 2010, hundreds of thousands were dead or injured, and millions were suddenly homeless. There were huge new medical needs on top of the pre-existing ones—for surgery, post-operative care, shelter, and water and sanitation. This was compounded months later by a cholera epidemic that ultimately affected every part of the country. Between October 2010 and July 2011, cholera killed more than 5,000 Haitians; MSF treated more than 140,000 patients.

Google Tools

We used **Google Earth** to help us visualize the cholera case origins and transmission hot spots. Upon admission, all patients were asked what neighborhood they came from, and this information was transferred (anonymously) to a Google Earth overlay. We could then better see the progress of the outbreak and which neighborhoods had greater need for medical services. We used the maps to look for clusters of cholera cases related to drinking water sources. They also allowed us to visually show the correlation between water outages and cholera cases; this compelling visual demonstration helped MSF to advocate for better water and sanitation in vulnerable areas. If a picture is worth a thousand words, a map can be worth a thousand spreadsheets. We also mapped and shared information about our clinics and facilities amongst our teams and other professionals as shown in the image below.

Tech Tip

Don't underestimate the power of technology. Mapping and medical aid have an illustrious history! Dr. John Snow is considered to be one of the fathers of epidemiology. He traced the source of a cholera outbreak in London in 1854 by mapping case origins and identifying the water pump on Broad Street in Soho that was spreading the disease.

Modern medical aid organizations like MSF can now use powerful online tools, like Google Maps, to look at disease patterns in ways that Dr. John Snow could only have dreamed about.





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