

LE RÉSEAU OMS D'ÉVALUATION ET DE RÉPONSE CLINIQUES AUX MALADIES EMERGENTES (EDCARN)

PED
PANDEMIC
& EPIDEMIC
DISEASES

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30 Juin 2016

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**World Health
Organization**

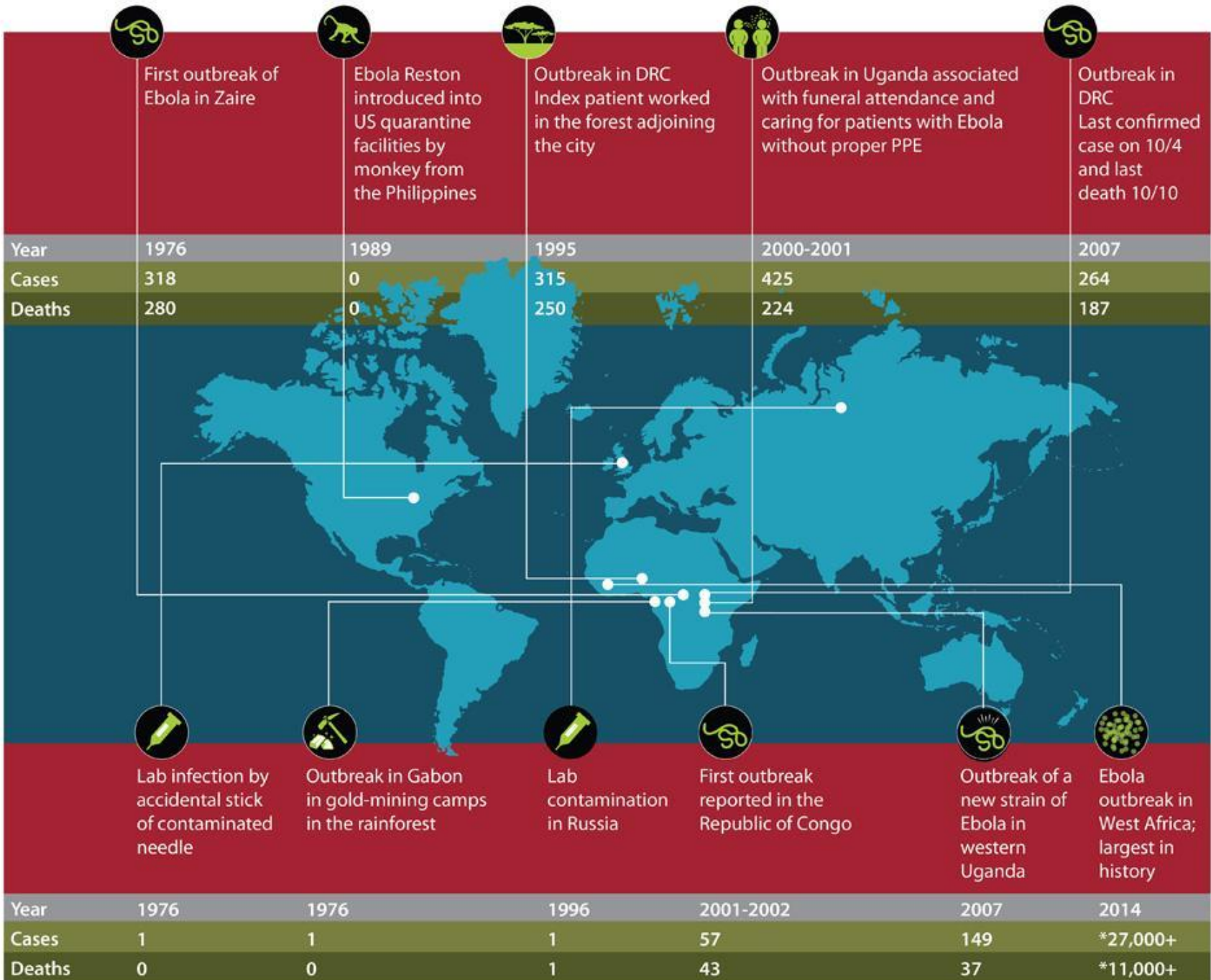




Unité Prise en Charge d'Ebola







Quelle est la meilleure prise en charge?

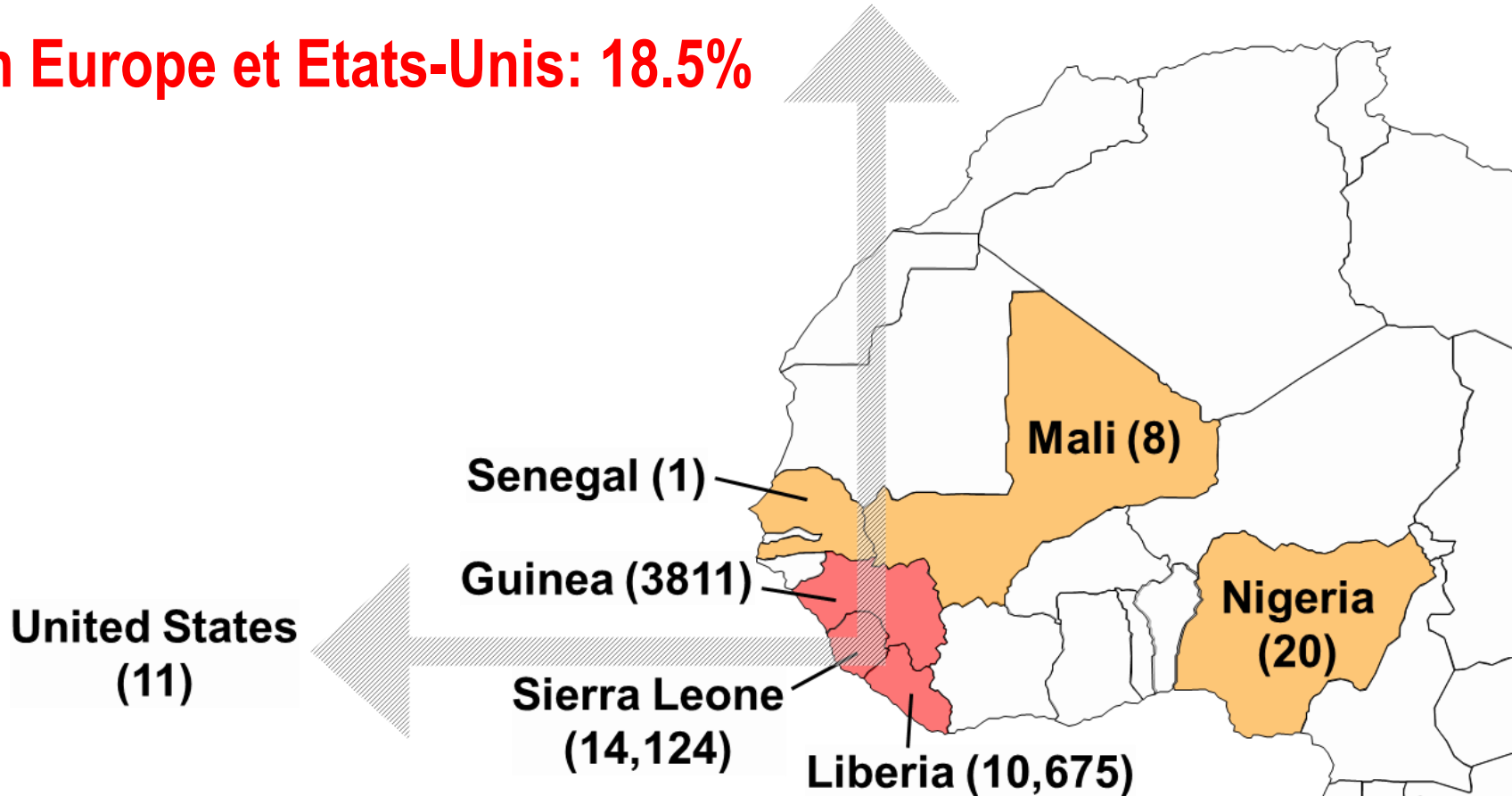
- **Quels fluides et électrolytes?**
- **Agents anti-diarrhéiques?**
- **Antibiotiques prophylactiques?**
- **Produits sanguins?**
- **Thérapie immunitaire?**
- **Agents antiviraux?**



CFR en Afrique: 40-70%

CFR en Europe et Etats-Unis: 18.5%

- Germany (3)
- Spain (3)
- United Kingdom (3)
- France (2)
- Netherlands (2)
- Italy (1)
- Norway (1)
- Switzerland (1)



Outbreaks of Filovirus Hemorrhagic Fever: Time to Refocus on the Patient

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In the 40 years since the recognition of filoviruses as agents of lethal human disease, there have been no specific advances in antiviral therapies or vaccines and few clinical studies on the efficacy of supportive care. On 20 September 2006, experts from 14 countries representing 68 institutions integrally involved in the response to outbreaks of filovirus hemorrhagic fever gathered at the National Microbiology Laboratory of the Public Health Agency of Canada in Winnipeg to discuss possible remedies for this grim situation, in a unique workshop entitled “Marburg and Ebola Hemorrhagic Fever: Feasibility of Prophylaxis and Therapy.” A summary of the opportunities for and challenges to improving treatment of filovirus hemorrhagic fevers is presented here.

THE PROBLEM

The filoviruses, Marburg virus and Ebola virus, have

Only 43 (14%) of ~300 individuals with suspected cases of Marburg hemorrhagic fever identified during the 2005 outbreak in Angola were isolated. Similarly low

Ebola Virus: Sensationalism, Science, and Human Rights

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Outbreaks of the filoviruses, Ebola and Marburg, usually garner immense public attention, often with a sensationalist bent in the lay press, focused on the apparently mysterious origins of the outbreak and the high mortality rates. The scientific community may present a more objective viewpoint, but usually with a rather technical focus on identifying epidemiological risk factors and experimental therapies and vaccines. Often lost in the discussion are the human rights elements that consistently underlie large outbreaks of these dangerous viruses.

Keywords. Ebola; Marburg; viral hemorrhagic fever; human rights.

"The biggest problems at Donka are no electricity, no water, no equipment, no sanitation, and very high rates of infection."

Bintu Cissé, adjunct midwife supervisor at Donka National Hospital in Conakry, Guinea, site of an outbreak of Ebola virus disease with nosocomial transmission [1].

fever sets in, and within days the man is deathly ill, bleeding from the eyes, his internal organs liquefying. His disease quickly spreads to all those in proximity. Case numbers mount rapidly. Chaos ensues, overwhelming the local health care system. Fears that the event is a bioterrorist attack rattle the population. Such is the notion of Ebola virus garnered from popular accounts, such as Richard Preston's best-selling novel *The Hot Zone* and

EDCARN

Emerging Diseases Clinical Assessment and Response Network

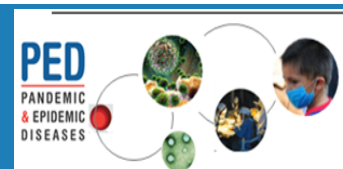
Clinical & Infection Control
Pandemic & Epidemic Diseases
WHO-HQ, Geneva



World Health
Organization

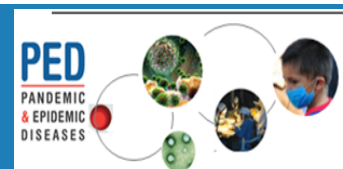
La Vision d'EDCARN

- Fournir ***une expertise technique à l'interface clinique*** des maladies infectieuses émergentes (MIE) pour augmenter la capacité à détecter et traiter efficacement et en sécurité
- Etablir des **normes pour une meilleure** prise en charge des MIEs
- ***Lien opérationnel pour la recherche clinique*** pendant des épidémies des MIE
- Catalyseur du traitement et prévention des MIE sur un ***continuum allant du laboratoire au patient et au-delà***:
Science de base → modèles animaux → mécanismes de régulation → essais cliniques → amélioration des soins aux patients → directives de santé publique



La Mission de EDCARN

- **Fournir un soutien aux intervenants de première ligne** par le développement rapide d'approches adaptées à chaque pays, fondées sur des preuves et des protocoles normalisés pour la prise en charge et la collection de données systématiques et standardisées sur les MIE, afin d'établir de meilleures procédures, d'identifier les principales lacunes et de rechercher des solutions
- **Déploiement rapide des experts internationaux** pour fournir des conseils techniques
- **Fournir une plate-forme** pour discussion, échange d'informations et apprentissage
- **Coordonner la préparation des recommandations cliniques** et du matériel de formation
- **Coordonner et assurer la formation** des cliniciens et des chercheurs nationaux et internationaux
- **Fournir une plate-forme de recueils centraux de données** pour les données cliniques et associées, suivis par des analyses



Critères de Participation en EDCARN

- EDCARN est ouvert aux organisations, institutions et individus ayant un niveau élevé de reconnaissance nationale et internationale dans le domaine de la prise en charge et/ou recherche clinique sur les MIEs
- Membres désignés par le Comité de pilotage d'OMS auprès des organismes nationaux de santé publique, des réseaux cliniques ou de recherche régionaux et/ou nationaux existants et des représentants régionaux d'institutions universitaires ainsi que d'autres intervenants nationaux et internationaux.

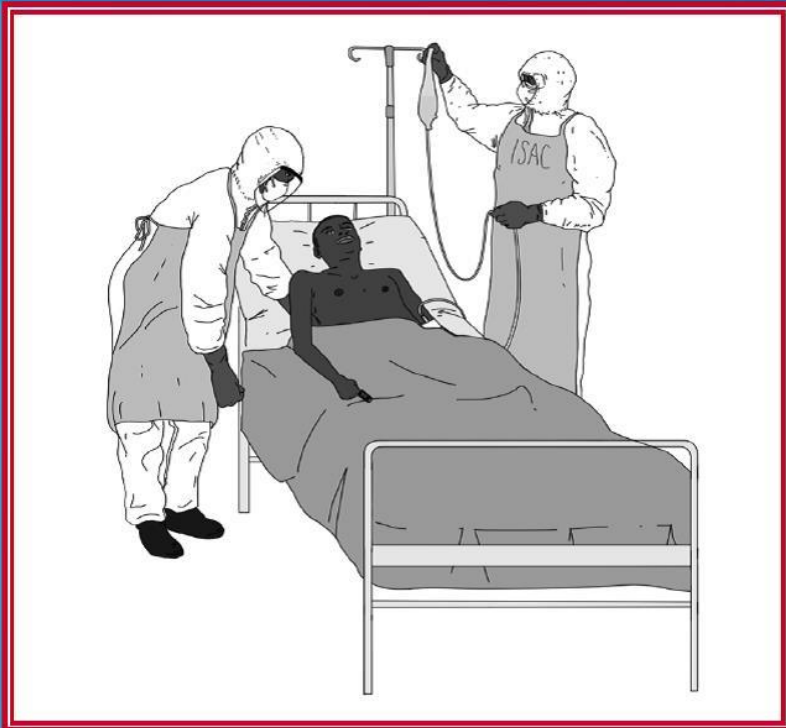
Les Productions de EDCARN

- Soutien technique pour le soin optimal
- Mise aux normes des protocoles cliniques de recherche
- Rapides lignes directrices de conseils
- Référence centrale de données
- Rapports annuels
- Publications évaluées par les pairs
- Plate-forme pour discussions

Clinical management of patients with viral haemorrhagic fever

A pocket guide for front-line health workers

FEBRUARY 2016



Interim emergency guidance for country adaptation

Perte GI de diarrhée et de vomissements:

- quantifier entrée et sortie
- administrer des fluides de manière agressive pour faire face aux pertes

Les anomalies électrolytiques (de pertes GI):

- Surveillance de chevet (ex., I-STAT)
- sels de réhydratation orale
- K⁺, glucose, HCO₃⁻
- Peut-être la cause immédiate de la mort (arythmie, arrêt cardiaque, saisie)

Physiologie du choc septique:

- Fluides agressifs (mais surveillance pour fuite vasculaire/œdème pulmonaire)

Gestion symptomatique des nausées, des vomissements, de la diarrhée, des convulsions, des myalgies, des douleurs abdominales

Utilisation des antibiotiques prophylactiques pour une translocation intestinale éventuelle



Treatment of Marburg and Ebola hemorrhagic fevers: A strategy for testing new drugs and vaccines under outbreak conditions

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Received 16 November 2007; accepted 19 January 2008

Abstract

The filoviruses, Marburg and Ebola, have the dubious distinction of being associated with some of the highest case-fatality rates of any known infectious disease—approaching 90% in many outbreaks. In recent years, laboratory research on the filoviruses has produced treatments and vaccines that are effective in laboratory animals and that could potentially drastically reduce case-fatality rates and curtail outbreaks in humans. However, there are significant challenges in clinical testing of these products and eventual delivery to populations in need. Most cases of filovirus infection are recognized only in the setting of large outbreaks, often in the most remote and resource-poor areas of sub-Saharan Africa, with little infrastructure and few personnel experienced in clinical research. The present research priorities and environment for clinical research on treatment and vaccine prevention.

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Keywords: Ebola virus; Ebolavirus; Marburg virus; Marburg disease; Biodefense

Accords de recherche
clinique/protocoles prépositionnés

Mise à jour thérapeutique EVD

Agent	Source	Outcome in EVD
Conv. plasma	Generic	Clinical trials ongoing
ZMapp	Mapp Bio	Clinical trial ongoing
Favipiravir	Toyama/Fuji	Clinical trial ongoing
Brincidofovir	Chimerix	Clinical trial stopped
TKM-Ebola	Tekmira	Clinical trial ongoing
BCX-4430	Biocryst	Phase 1
Interferon- β 1a	Biogen	Clinical trial ongoing
AVI-7537	Sarepta	Phase 1
FX-06	F4 Pharma	Use in EVD cases
rNAPc2	ARCA Biophar	Not used to date

Considérations éthiques pour la recherche clinique pendant une épidémie

- Approbation du comité éthique
- Placebo ou non?
- Diversion du personnel de santé de la réponse aux épidémies/soins aux patients jusqu'à la recherche?

Les infections du virus Ebola chez les travailleurs de santé

3.4% de tout les cas d'EVD pendant l'épidémie



Pays	Cas	Morts
Guinée	178	91
Libéria	372	180
Sierra Leone	302	221
Total	852	492

Les données sont les cas confirmés de décès seulement, en dehors des décès en Sierra Leone, qui comprennent les cas confirmés, probables, et les décès suspects. * Données du 17 Février.

Équipement de protection individuelle



The Obama Administration called on innovators
**TO HELP IN THE FIGHT
AGAINST EBOLA**

by competing to find the best solutions that could
be used on the frontlines as quickly as possible.

**A TEAM FROM JOHNS HOPKINS
UNIVERSITY ANSWERED THE CALL
WITH A REDESIGNED PERSONAL
PROTECTIVE EQUIPMENT SUIT
THAT IS QUICKER, MORE
COMFORTABLE, AND SAFER FOR
HEALTH CARE WORKERS.**



Louisiana's policy on Ebola and travel is harmful: Drs. Daniel Bausch, Susan McLellan and Frederique Jacquerioz



Ebola patients sit inside the Island Clinic Treatment center, where they are kept under quarantine in Liberia, 2014. The rate of new Ebola infections in Liberia appears to be declining and could represent a turning point, the World Health Organization said Wednesday, but the epidemic is far from over. (AP Photo/ Abbas Dulleh)



Évacuation et soins du personnel





Equipe de travailleurs qualifiés pour la prise en charge et recherche clinique



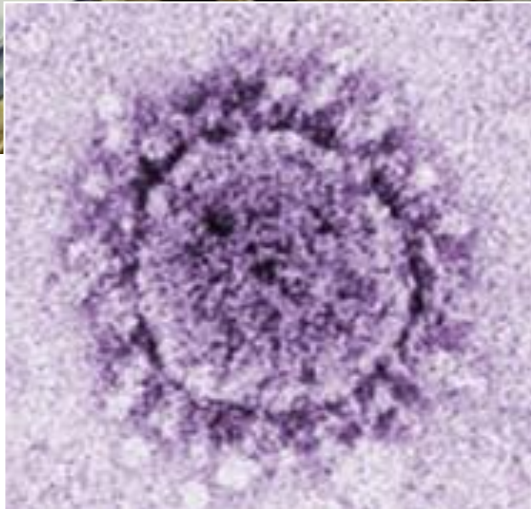
Outils Cliniques Mobiles



Laboratoires Mobiles



SARS



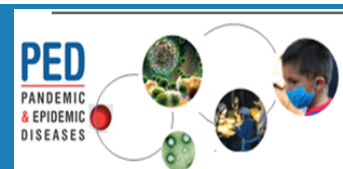
Gouvernance d'EDCARN

- **Coordinateur et Secrétariat**

Suivant la disponibilité des ressources humaines et financières, la coordination et le secrétariat pour EDCARN sera fourni par l'OMS, agissant par l'entremise du Health Emergencies Cluster au siège de l'Organisation à Genève.

- **Membres principaux du réseau**

Chaque organisation de base qui fait partie du réseau aura un coordinateur désigné.



Global Alert and Response (GAR)

[GAR Home](#)

[Alert & Response Operations](#)

[Diseases](#)

[Global Outbreak Alert & Response Network](#)

[Biorisk Reduction](#)

Global Outbreak Alert & Response Network

The Global Outbreak Alert and Response Network (GOARN) is a technical collaboration of existing institutions and networks who pool human and technical resources for the rapid identification, confirmation and response to outbreaks of international importance. The Network provides an operational framework to link this expertise and skill to keep the international community constantly alert to the threat of outbreaks and ready to respond.



Video

[GOARN partners working in the field](#)
Streaming video (wmv) 00:03:40

[GOARN partners working in the field \(French\)](#)
Streaming video (wmv) 00:03:40

[The Global Outbreak Alert and Response Network \(GOARN\)](#)

[The Global Outbreak Alert and Response Network \(GOARN\) \(French\)](#)

Highlights

[Avian influenza](#)
[Latest information](#)

Disease outbreaks

24 May 2014
[Ebola virus disease, West Africa – update](#)

23 May 2014
[Middle East respiratory syndrome coronavirus \(MERS-CoV\) – update](#)

22 May 2014
[Middle East respiratory syndrome coronavirus \(MERS-CoV\) – update](#)

[Disease Outbreak News \(DONs\)](#)

EDCARN : Types de Membres

- **Membres principaux du réseau sélectionnés par le comité de direction d'OMS**
- **Groupes de consultation pour maladies ou syndromes spécifiques**

American Society of Tropical Medicine and Hygiene

13-17 Novembre, 2016

Atlanta, Georgia, Etats-Unis



Photo: TripAdvisor

<http://www.astmh.org>



Hommage aux travailleurs de la santé victimes de l'épidémie



Bausch *et al.* (2014) A Tribute to Sheik Humarr Khan and all the Healthcare Workers in West Africa who have Sacrificed in the Fight Against Ebola Virus Disease: Mae we hush. *Antiviral Res* 111:33–35