

Vaccine Considerations in Disaster Situations



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Vaccination in Disasters

- Prevent outbreaks of vaccine preventable diseases (VPD), especially those with high morbidity / mortality
 - Measles, Rubella, and other VPDs
- Prevent tetanus cases in the injured
- Restore routine vaccination as soon as possible



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Tuesday, 12 January 2010 - 4.55pm

After 90 seconds

1.2 to 1.4 million people
lost their homes

Port-au-Prince metropolitan area,
Leogane and Jacmel were the areas
most affected



Human Impact

- > 220,000 deaths
- 300,000 wounded
- 1.6 million displaced
- 1,342 camps
- 100 to > 50,000 residents per camp



Guidelines for Humanitarian Response (Sphere)

- Provide emergency supplies such as blankets, tarps and cooking equipment
- Start nutrition monitoring and epidemiological surveillance
- Support establishment of basic health services
- Provide essential drugs and emergency kits
- **Vaccinate children 6 months to 14 years against measles**
- **Provide vitamin A supplements**
- **Provide critical inputs such as vaccines and cold chain equipment, and experts in training and social mobilization**



Vaccination in acute humanitarian emergencies: a framework for decision making (endorsed by SAGE, Nov 2012)

STEP 1: Risk assessment of each vaccine-preventable disease (VPD)

		General level risk factors		
		High	Medium	Low
Level of risk factors specific to the VPD	High	Definitely Consider	Definitely Consider	Possibly Consider
	Medium	Definitely Consider	Possibly Consider	Do not consider
	Low	Do not consider	Do not consider	Do not consider

If green or yellow, move on to step 2.



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Vaccination in acute humanitarian emergencies: a framework for decision making

STEP 2: Considerations on vaccines and massive campaigns

Vaccine characteristics

- Efficacy of complete and partial schedule
- Presentation
- Contraindications and safety
- Availability, cost and WHO prequalification
- Cold chain and storage

Campaign Considerations

- Target population
- Risk groups or areas
- Planning, logistics, social mobilization, monitoring, etc.



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Petion Ville Club – August 2009



Petion Ville Club – January 13, 2010



Petion Ville Club – January 16, 2010



Jan 15, 2010

Image © 2010 GeoEye

2009 Google

Imagery Date: Jan 16, 2010

18°32'16.44" N 72°18'04.03" W elev. 575 ft.

Eye alt. 2158 ft.

Petion Ville Club – January 25, 2010



Vaccination in acute humanitarian emergencies: a framework for decision making

STEP 3: Evaluation of context, enablers and constraints, alternative interventions and competing needs

- Policy considerations
- Security issues
- Human resources
- Financial considerations
- Alternative interventions
- Target population
- Interventions that can be integrated
- Operational studies

Ongoing monitoring of changes to the situation should be carried out to reassess status (starting from from step 1)



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Social Conflict in Asuncion due to vaccine shortage



Vaccinated population in Asuncion in 3 days: 800,000



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Vaccination in acute humanitarian emergencies: a framework for decision making

This framework should not be prioritized above other specific guidelines for VPD, although in most cases (eg. measles) it is compatible and complementary

Pending issues:

- *Consider including rabies vaccine on the list*
- *Discuss issues concerning the purchase and use of vaccines that are not prequalified*
- *Delve into risk-benefit analysis and ethical considerations*



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Why avoid a campaign that is not justified in disaster situations?

- It may compete for resources with interventions that have more immediate potential to save lives
- It can lead to a false sense of security, potentially reducing important hygiene and sanitation practices
- Mass vaccination in difficult conditions is a challenge and is not without risk: ESAVI, unsafe injection practices



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Summary of PAHO Recommendations

- Urge countries and agencies to use the decision-making framework
- Seek to prevent outbreaks of VPD with high morbidity /mortality and minimize the risk of reintroduction of VPDs eliminated in the Region
 - Important considerations for measles, rubella, polio, and tetanus (and yellow fever in enzootic zones)
 - Vaccination of the humanitarian assistance teams



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Summary of PAHO Recommendations

- Seek to avoid unjustified vaccination campaigns
- Restore routine vaccination as soon as possible
 - Assess damage to cold chain and check vaccine stocks at different levels
 - Implement the use of cold boxes (RCW42) (if there is ice) to preserve vaccines in affected areas
 - Start to restore the supply chain and cold chain as soon as possible (buying refrigerators, heaters, thermometers, etc.).



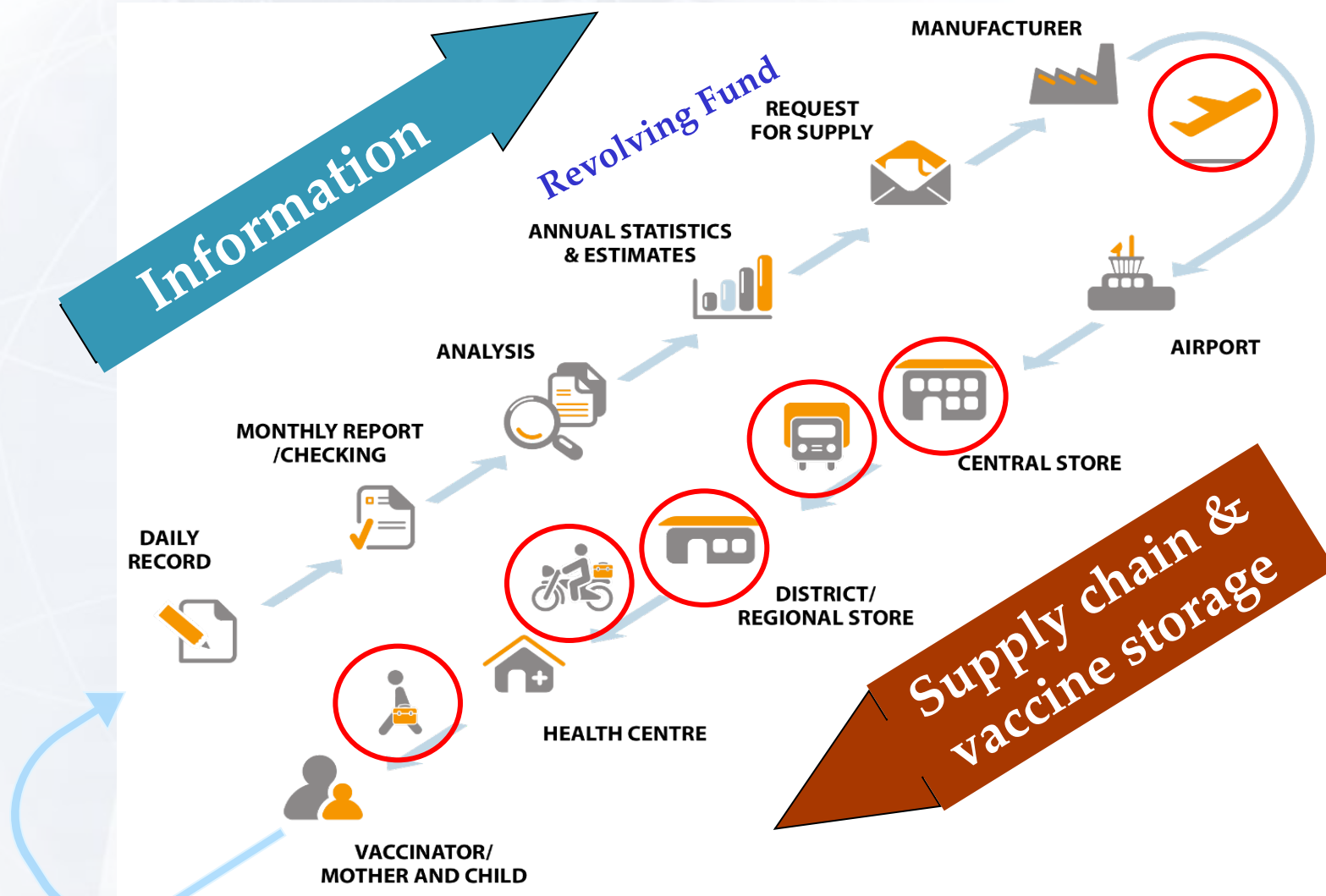
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Supply and cold chain



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