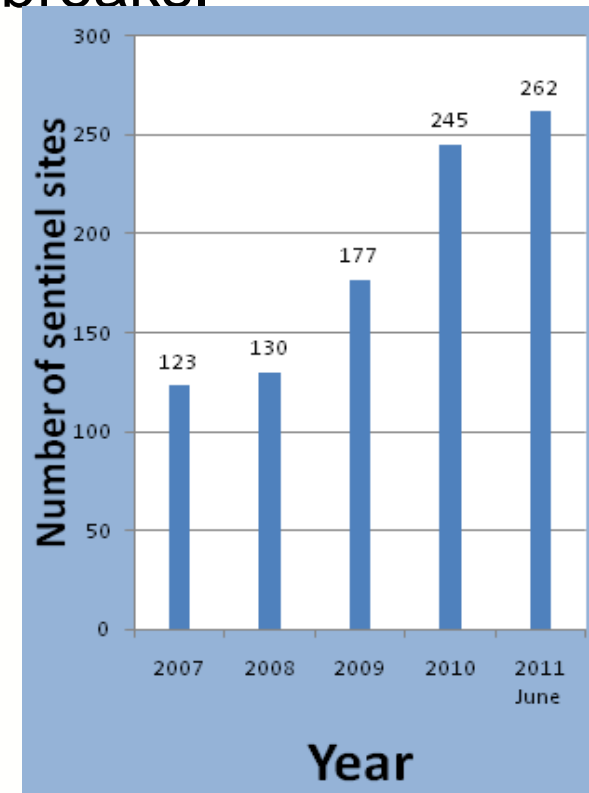# Diseases Surveillance & Disease Early warning System (DEWS)

in Afghanistan

For IANPHI 6th annual meeting
Helsinki Sep. 26-27, 2011

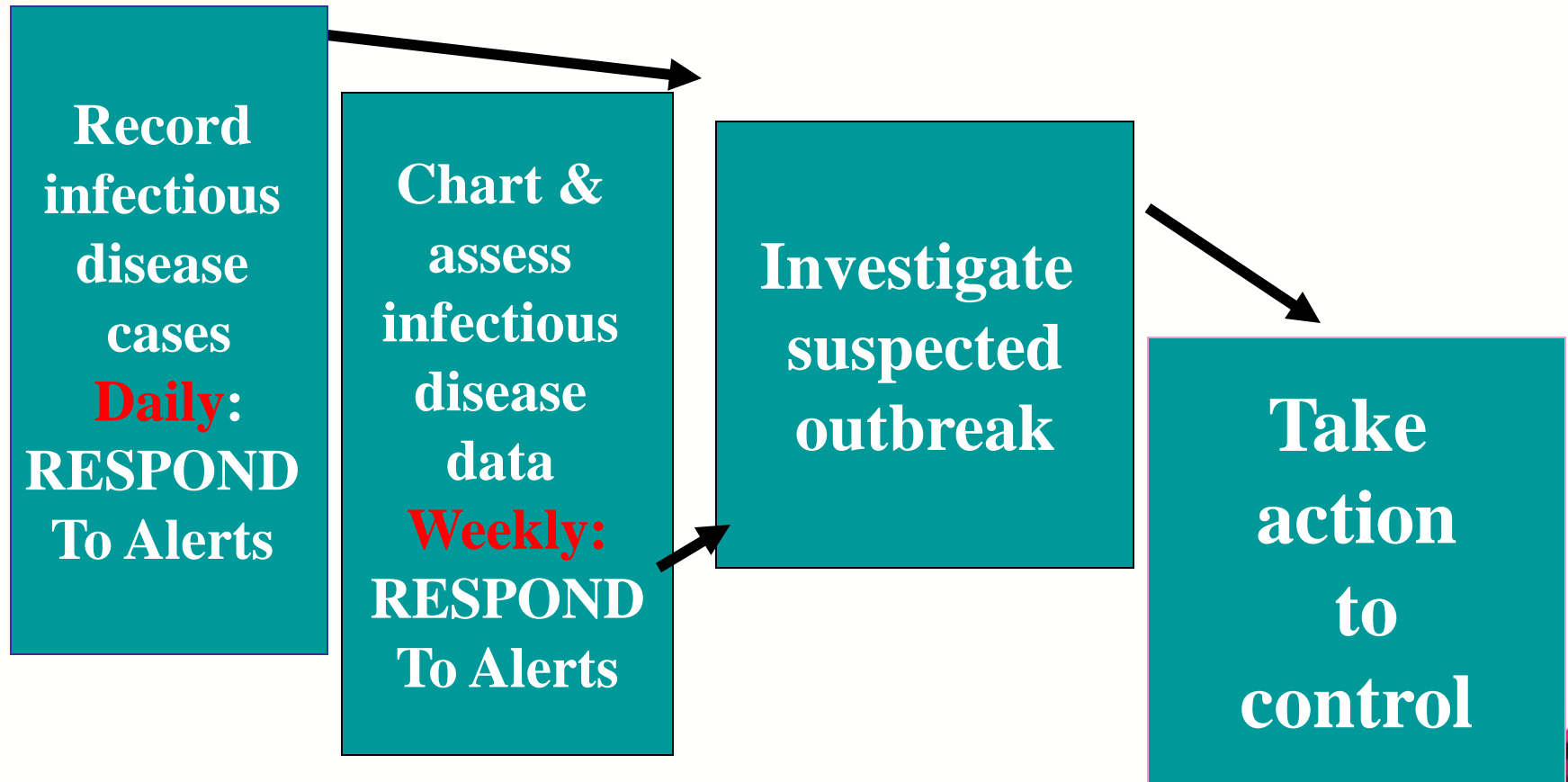**By: Bashir Noormal, MD, MPH**
Director General
Afghan Public Health Institute (APHI)

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Background

- DEWS established mid December 2006 in 8 out of 34 provinces (Centers of the regions) for the <u>early detection, investigation and control of</u> outbreaks throughout the country to <u>reduce morbidity and mortality</u> by early <u>detection and response</u> to outbreaks.

- Today it has expanded to over 250 districts out of 396 with **262 sentinel sites** (public health facilities)

- Has planed, to expand it further to the level of all districts of the country and to the private sector and community

DEWS action:
Detect, Confirm, Control

Record infectious disease cases **Daily****: RESPOND To Alerts**

Chart & assess infectious disease data **Weekly:** **RESPOND To Alerts**

Investigate suspected outbreak

Take action to control

All in full coordination of other stakeholders and partners

Overall disease outbreaks-

a high and increasing proportion of alerts received are being investigated and confirmed

Table: Distribution of number of alerts received, investigated and those confirmed by reporting year 2007-July 2011

Year	Number of alert received (a)	Number of alert investigated (b) (n-%)	Number of outbreak confirmed (c) (n-%)
2007	167	162 (97%)	137 (84.6)
2008	239	236 (99%)	189 (80.1)
2009	243	238 (98%)	222 (93%)
2010	225	223 (99%)	209 (94%)
2011	236	234 (99%)	217 (93%)
Total	**1110**	**1093 (99%)**	**974 (89%)**

Timeliness of Surveillance System

An increasing proportion of outbreaks are being investigated within 24 hours
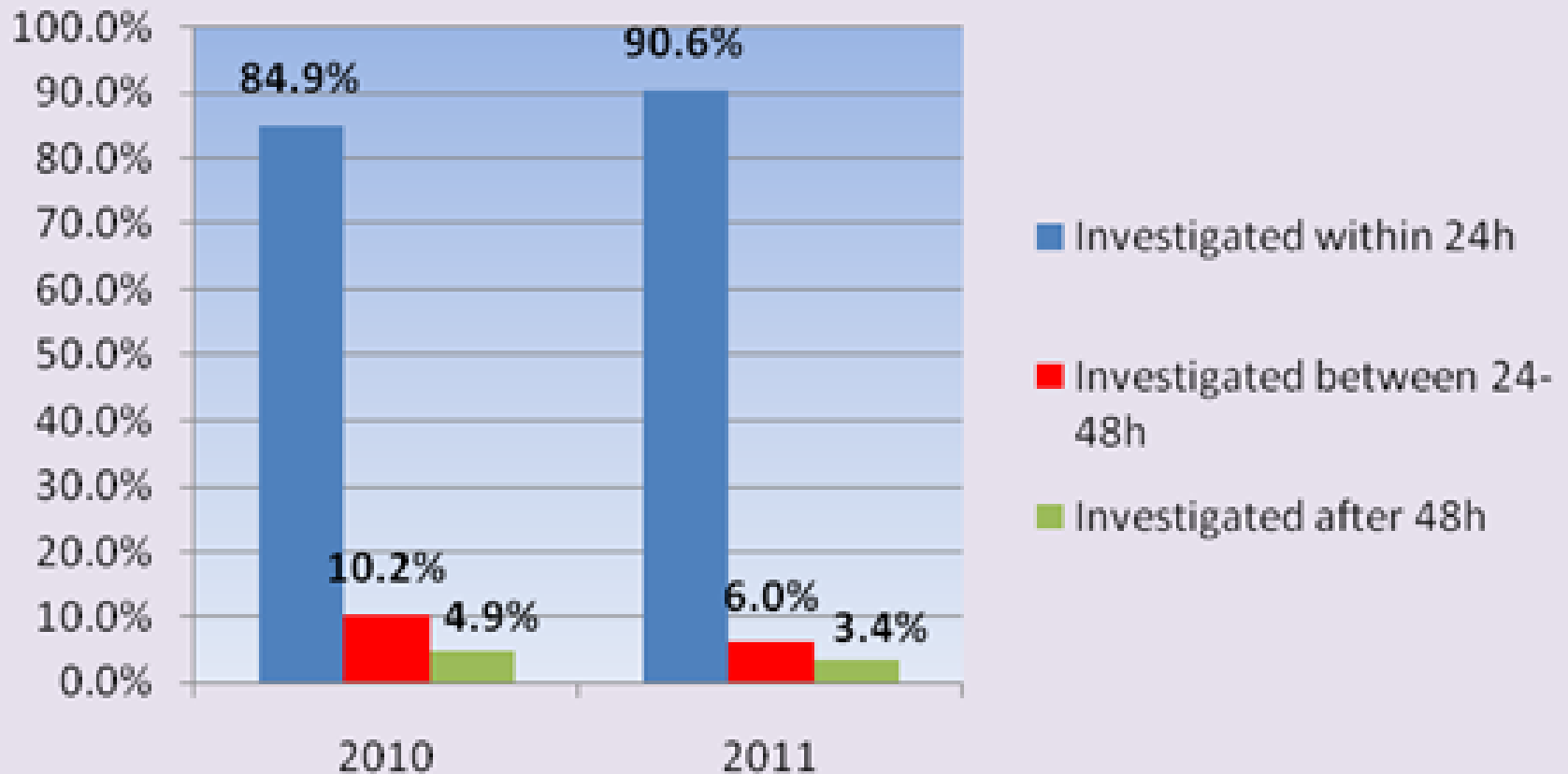
Diseases profiled

- **Vaccine Preventable Diseases**
  - Measles
  - Pertussis
  - Diphtheria
  - AFP/Polio
  - Acute Hepatitis

- **Water Borne Diseases**
  - Acute Watery Diarrhea
  - Cholera

- **Zoonotic Diseases**
  - Brucellosis
  - Q-fever
  - Rabies
  - CCHF
  - Avian Influenza
  - Anthrax
- **Aerosol Poisoning**
- **ARI**
- **Tetanus**
- **Pregnancy Related Death**
- **Meningitis**
- **Malaria**
- **TB**
- **Typhoid Fever**
- **Malnutrition**

Morbidity

Table : Acute diarrheal diseases morbidity DEWS 2008-July 2011				
Year	No. of AWD cases from DEWS sentinel sites	No. of AWD with dehydration cases from DEWS sentinel sites	No. of AWD Outbreaks from community(1)	No. of cases during outbreaks from Community
2008	380,153	51,955	8	1,437
2009	490,065	57,905	2	347
2010	665,666	64,917	3	55
July 2011	484,608	54,209	2	**88**

Table : No. of Cholera outbreaks 2008 - July 2011		
Year	No. of outbreaks	No. of cases
2008	26	5,246
2009	43	1,721
2010	17	2,203
2011, 19th July	**20**	**2,083**

[1] These outbreaks are Non-cholera acute watery diarrhea outbreaks.
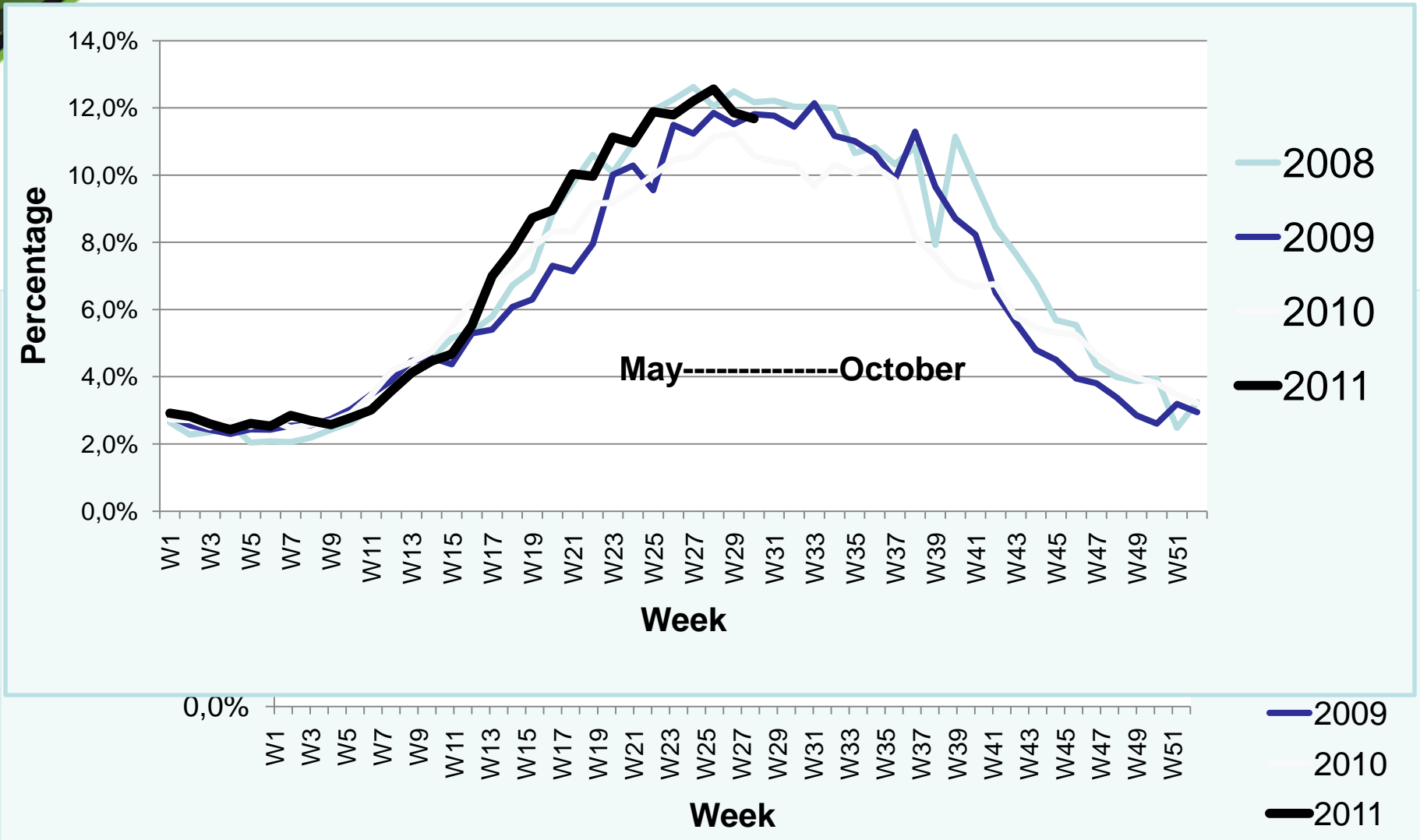
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Cholera Morbidity and Mortality

Table : Cholera Morbidity and mortality data July, 2011

- Highest mortality in insecure provinces

- In 2009 with 30 deaths CFR was 1.74%

- In 2010, with 10 deaths CFR was 0.42%

- In 2011, with 13 deaths CFR is 0.62% (confirmed vibrio cholera Ogawa

Province	Cases	Deaths	CFR%
Kandahar	**317**	**5**	**1.58**
Ghazni	**377**	**5**	**1.33**
Khost	68	0	0.00
Nangahar	8	0	0.00
Paktya	**11**	**2**	**18.18**
Faryab	1045	0	0.00
Kabul	5	0	0.00
Samangan	2	0	0.00
Zabul	165	1	0.61
Jawzjan	81	0	0.00
Helmand	4	0	0.00
Total	**2083**	**13**	**0.62**

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Seasonality

Figure : Percentage of AWD without dehydration cases as a proportion of total consultations by week-2008 -2011

Thanks

**for
Attention**

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