

Highlights

Epidemiological weeks (20-23) of 2009

N. of Reporting Units 17/17

Population under surveillance 869 375

- The number of people under surveillance for this reporting period is 869 375 out of 1 073 303 (81%) Palestine refugees registered with UNRWA in the Gaza Strip. This number corresponds to beneficiaries accessing UNRWA Health services in 2008;
- The reporting completeness for epi-weeks (twenty-twenty three) of 2009 was 100%;
- The number of consultations in the period 20-23 weeks shows a stationary trend with a slight decrease in the number of consultations in week 23.
- Watery diarrhoea as well as acute bloody diarrhoea and viral hepatitis remain the major causes of morbidity among reportable infectious diseases in the refugee population of the Gaza Strip. During weeks twenty-twenty three, the morbidity trend of all major diseases was fluctuating. An increasing trend is particularly evident for watery diarrhoea cases as was seasonally expected.
- **Alert/alarm thresholds were not breached** for any of the major diseases in the reporting period, their incidence remained within the seasonally expected range.

Weeks (twenty-twenty three) of 2009

Dear Colleagues,

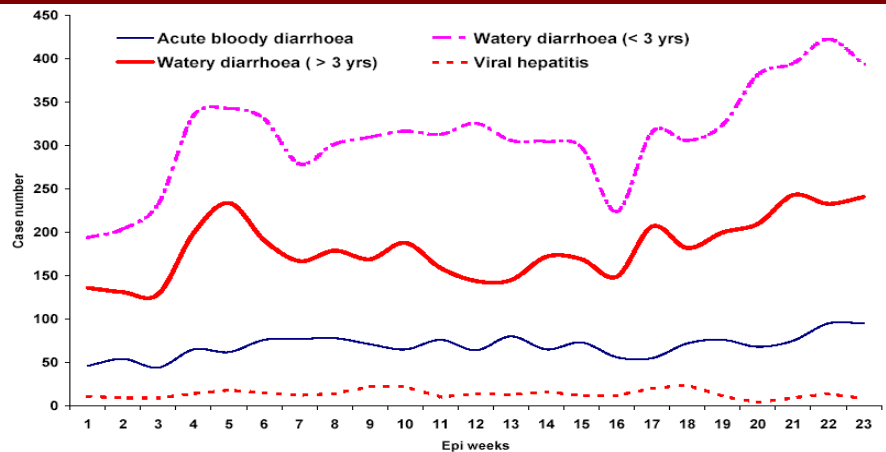
During weeks twenty-twenty three, the local epidemiological situation in the Gaza Strip as reported from UNRWA reporting units was relatively uneventful with no evidence of outbreaks.

Acceleration of events concerning influenza A (H1N1) pandemic was the major event in the reporting period with the declaration of the pandemic alertness phase 6 on the 11th of June 2009 by the Director General of WHO. According to the latest WHO global update (15th of June) 74 countries have officially reported 35,928 confirmed cases of influenza A (H1N1), including 163 deaths. As of the 17th of June 2009, the WHO Eastern Mediterranean Region reported 96 laboratory confirmed cases of influenza A (H1N1) with no deaths: Bahrain (12 cases), Egypt (26 cases), Jordan (2 cases), Kuwait (18 cases), Lebanon (11 cases), Morocco (3 cases), Palestine (2 cases), Qatar (3 cases), Saudi Arabia (17 cases), United Arab Emirates (1 case) and Yemen (1 case).

Three out of the five Fields in which UNRWA is operating have already reported confirmed cases of influenza A (H1N1); namely Lebanon, Jordan and the West Bank.

Dr. Ali El-Jaish

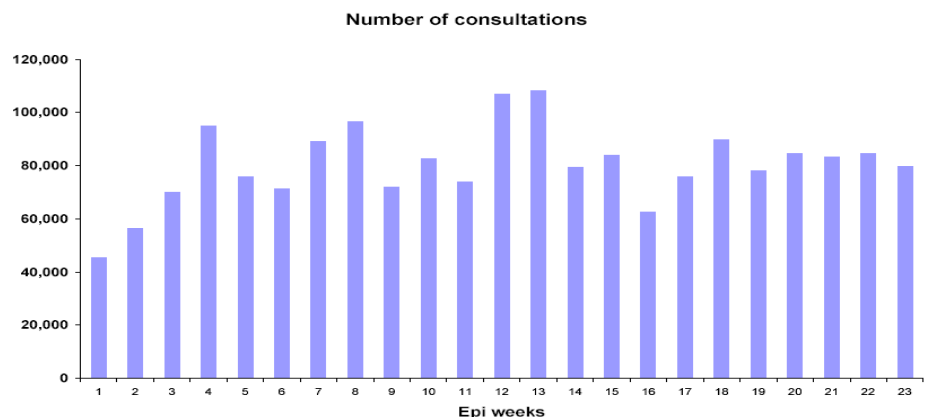
Weekly Reporting of four major diseases, UNRWA Gaza Strip



Patient consultations

During epi-weeks (twenty-twenty three) of 2009, surveillance data on infectious diseases has been received from all 17 UNRWA surveillance sites in the Gaza Strip (100% reporting completeness). The number of consultations per day was stable with very small fluctuations in the reported epi weeks.

Patient consultations per week, UNRWA health facilities, Gaza Strip 2009



Notifiable diseases

During weeks twenty to twenty-three, the epidemiology of watery diarrhoea, acute bloody diarrhoea, viral hepatitis and typhoid fever was consistent with what seasonally expected. **Neither alert nor alarm thresholds were breached during the reporting period.**

Priority Class-A Diseases

Class A diseases are reported within 24 hours in order to produce a rapid alert and initiate necessary actions to confirm or not a potential outbreak.

In the reporting period, no cases of class A diseases were reported from any of the 17 UNRWA reporting points (health centers).

Class-B Diseases

During the reporting period, five cases of mumps were reported, two cases came from Jabalia health center (north). Two cases were reported from Rafah health center (south) and one case from Nusierat health center (middle). The ages of affected cases ranged from 4-11 years (all were immunized at 15 months). The 5 cases were not geographically clustered and no epidemiological links could be traced. All needed management and public health measures were taken (isolation of cases was carried out and health education on disease transmission was provided to contacts).

The majority of non vaccine preventable Class B diseases (49%), were attributed to watery diarrhea among children under three years of age. Other leading causes of morbidity were watery diarrhea in the refugee population above three years (37%) followed by acute bloody diarrhea (13%). Cases of viral hepatitis (acquired through syndromic surveillance) accounted for 1% of the proportional morbidity.

Alert/alarm thresholds

UNRWA calculates alert and alarm thresholds using two and three standard deviations of a historical mean calculated on five preceding non epidemic years. Also a C-SUM method for threshold calculation, using a moving average, is integrated in the early warning system. The present bulletin reports on alert/alarm signals of epidemic prone diseases in the Gaza Strip.

Communicable diseases under surveillance

Class-A	Class-B	
	Vaccine Preventable	Other
Acute flaccid paralysis		
Cholera	Diphtheria	Brucellosis
Meningitis (meningococcal/viral/other)	Measles	Acute bloody diarrhoea
	Mumps	Watery diarrhoea
	Pertussis	Gonorrhoea
	Rubella	HIV/AIDS
	Tetanus neonatorum	Viral hepatitis
		Typhoid fevers
	Leishmaniasis	
	Tuberculosis (Pulmonary/extra-pulmonary)	

- Class-A diseases are to be notified within 24 hours
- Class-B diseases are to be notified weekly

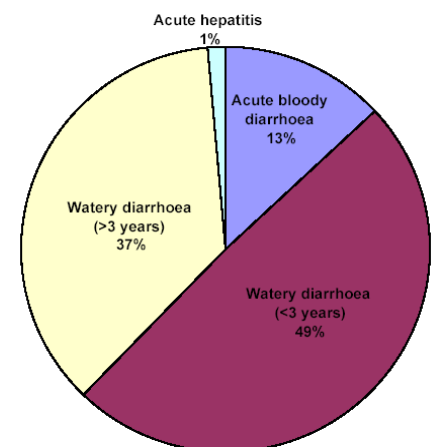
Reporting of Class-A Diseases, UNRWA Gaza Strip

Class-A Diseases Weeks (20-23) 2009	Case count
Acute flaccid paralysis	0
Non polio	0
Poliomyelitis	0
Cholera	0
Suspected	0
Confirmed	0
Meningitis	0
Meningococcal	0
Viral	0
Other	0

Reporting of Class-B Diseases, UNRWA Gaza Strip

Class B diseases Weeks (20-23) 2009	Case count
Diphtheria	0
Measles (Suspected)	0
Measles (Confirmed)	0
Mumps	5
Pertussis	0
Rubella (Suspected)	0
Rubella (Confirmed)	0
Tetanus neonatorum	0
Brucellosis	0
Acute bloody diarrhoea	333
Watery diarrhoea (children below 3 yrs)	1244
Watery diarrhoea (population > 3 yrs)	927
Gonorrhoea	0
HIV/AIDS	0
Viral hepatitis	35
Typhoid fevers	9
Leishmaniasis	0
TB (Smear positive)	0
TB (Smear negative)	0
TB (Extra-pulmonary)	0

Proportional morbidity-other class B diseases, Gaza Strip



Epidemic diseases

The incidence rate of acute bloody diarrhoea, watery diarrhoea (below and above three years age groups), viral hepatitis and typhoid fever are being calculated regularly and compared with the previous historical data. Any perceptible change due to seasonality is therefore also being detected.

Acute bloody diarrhoea

In the reporting period, incidence of acute bloody diarrhoea showed an increase from week twenty to twenty two and slightly decreased in week twenty three. No alert/ alarm thresholds were breached during the reporting period.

Watery diarrhoea <3yrs

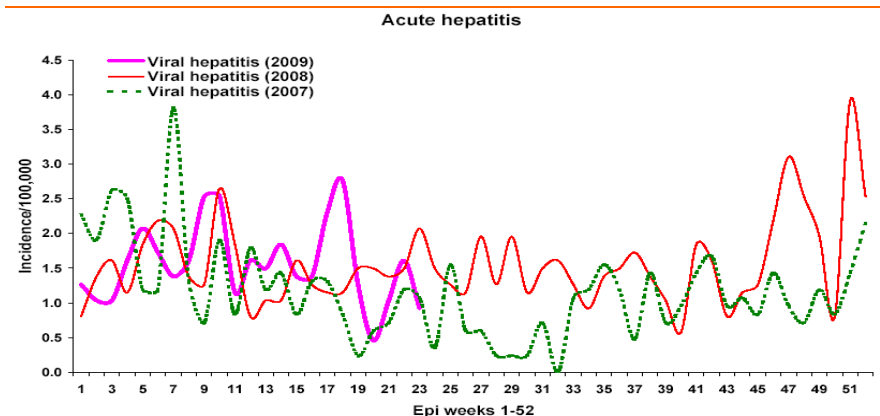
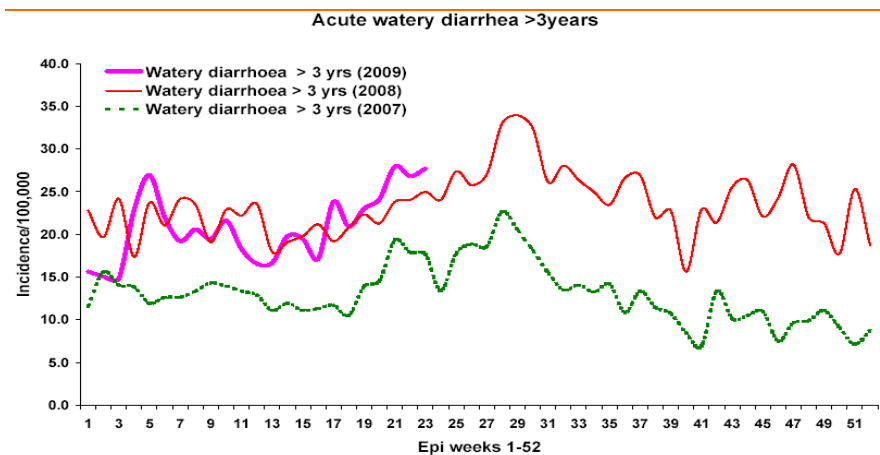
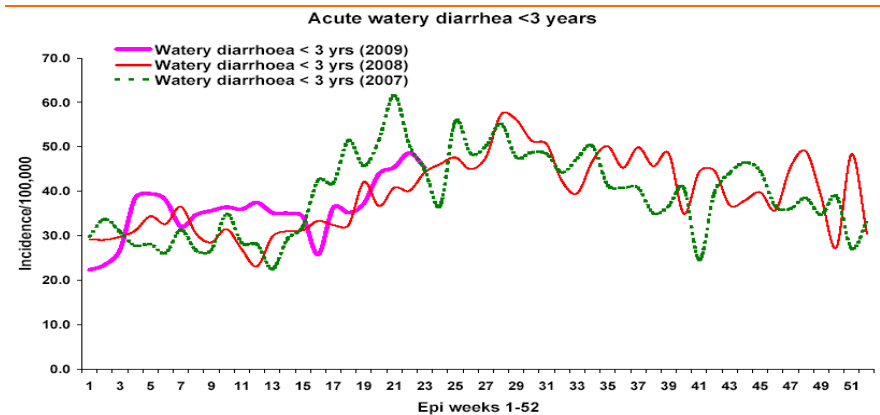
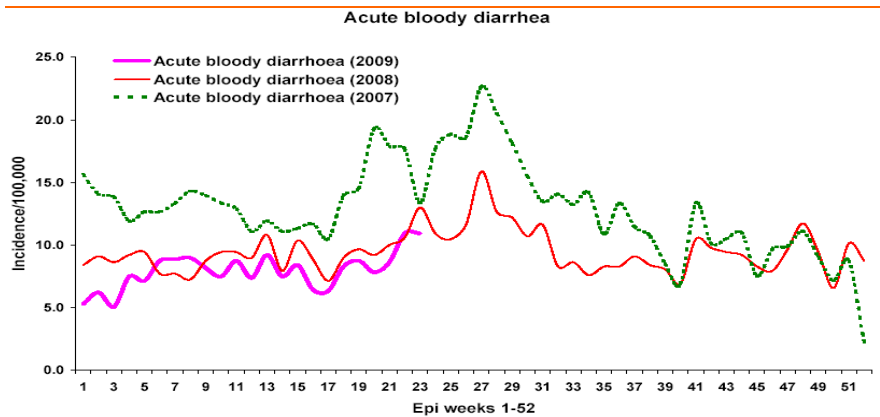
The reported incidence of acute watery diarrhoea in the below three year group increased from week twenty to twenty two and subsequently decreasing in week twenty three. This is consistent with the disease's seasonal variations and no alert/alarm thresholds were breached during the reporting period.

Watery diarrhoea >3yrs

Incidence of watery diarrhoea in the above three years age group showed an increase in the reporting period as was expected based on the seasonal pattern documented in previous years.

Acute Hepatitis

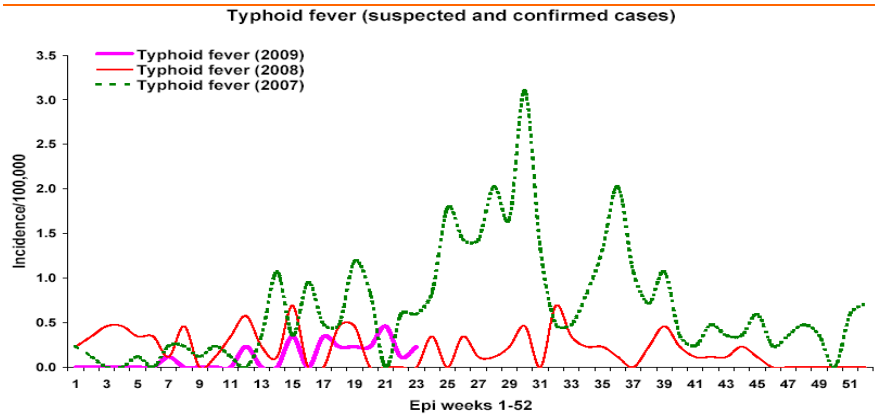
The incidence of viral hepatitis in the reporting period showed an increasing trend in week twenty to twenty two and subsequently decreased in week twenty three. Alert/alarm thresholds were not breached during the reporting period.



Epidemic diseases

Typhoid Fever

In the reporting period, the incidence of typhoid fever fluctuated with no recognizable trend. No alert/alarm thresholds were breached.



The Gaza Strip in numbers

Total Population*	1 500 202
Registered Palestine Refugees (IV quarter 2008)	1 073 820
Proportion (%) of Palestine refugees in the Gaza Strip	71.6
Life expectancy*	73.2
Proportion (%) of the refugee population aged 0-14 years(2008)	38.5
Fertility Rate (2005)	4.6
Infant Mortality Rate per 1000 live births (2004)	25.2
Anaemia prevalence (%) children 3-36 months (2006)	57.5
Anaemia prevalence (%) among pregnant women (2006)	44.9
Number of UNRWA Refugee Camps in the Gaza Strip (2008)	8
Proportion (%) of refugees living in refugee camps (2008)	46.1
% Refugee camps connected to water networks (2008)	100.0
% Refugee camps connected to sewerage networks (2008)	63.0
UNRWA Health Facilities in the Gaza Strip	17 HC + 3 SC
UNRWA Health Staff in the Gaza Strip	1239
Proportion (%) of refugees accessing UNRWA health services in 2008	81

Unless stated otherwise, figures refer to UNRWA data sources i.e. to the refugee population: UNRWA Registration Statistical Bulletin IV Q 2008, UNRWA Annual Report of the Department of Health 2007, G.Sabatinelli, S. Pace-Shanklin, F.Riccardo, A.Khader Facing socio-economic decline: delivering health to Palestine Refugees. Babylon No 1, 2008) * CIA World Fact-book (<https://www.cia.gov/library/publications/the-world-factbook/index.html> last accessed on the 9th of February 2009) .

Taking home points

During weeks twenty-three, the local epidemiological situation in the Gaza Strip as reported by UNRWA reporting units was relatively uneventful with no evidence of epidemics.

The most important epidemiological event in the reporting period was the continuous acceleration of influenza A (H1N1) pandemic to the degree of declaration of the pandemic alertness phase 6 by the WHO Director General on the 11th of June 2009.

As of the 15th of June, 74 countries had officially reported 35,928 confirmed cases of influenza A (H1N1), including 163 deaths.

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Epi intelligence

- **Egypt:** Nine new cases as well as one new death of avian influenza were reported to WHO during the reporting period. This brings the number of cumulative confirmed cases of the disease to 78. 27 of those have been fatal (source WHO EPR).

26 confirmed cases of influenza A (H1N1) have been reported with no deaths;

- **Israel:** 117 confirmed cases of influenza A (H1N1) were reported to WHO by Israel from the beginning of the Pandemic with no deaths. 110 were reported during the reporting period;

- **Syria :** No reported event;

Jordan : Two confirmed cases of H1N1 influenza A were reported with no deaths;

- **Iraq:** No reported event;

Disclaimer

The objective of this epidemiological bulletin is to report on health events occurring within the Gaza Strip. It is built upon the weekly epidemiological surveillance data for infectious diseases generated passively from 17 UNRWA health centers assisting Palestine refugees in the Gaza Strip. This bulletin, therefore, provides a snap shot of the reported infectious disease morbidity profile of this population. UNRWA beneficiaries are over 70% of the population in the Gaza Strip. Although, the focus of this bulletin is on the Gaza Strip, relevant epi-intelligence data for neighbouring and close countries is also provided. No data on mortality is currently collected by the UNRWA surveillance system.

For further information and feed-back

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