

## Highlights

### Epidemiological weeks 28-31 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 28-31 of 2009 was 100%;
- The number of consultations in the period 28-31 weeks shows more or less a stationary trend.
- 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 eight-thirty one, the morbidity trend of all major diseases was fluctuating up and down. No breaching of the alert/alarm thresholds was documented. In week thirty one; the four diseases showed a decreasing trend compared to week thirty.
- **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 eight-Thirty one of 2009

Dear Colleagues,

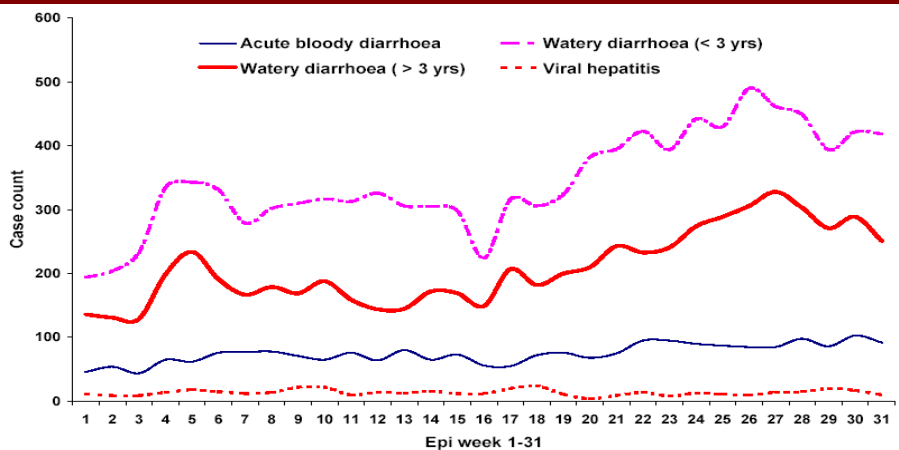
During weeks twenty-eight to thirty-one, the local epidemiological situation in the Gaza Strip as reported from UNRWA reporting units was relatively uneventful with no evidence of outbreaks.

Concerning influenza A (H1N1) pandemic; the regional situation according to the last update issued by EMRO on the 15th of August states that there are 2,802 laboratory confirmed cases of influenza A (H1N1) with eight deaths giving 0.3% case fatality rate. 421 of these cases were locally transmitted while the rest were imported.

Locally, there were no reported cases from Gaza Strip. While in the WB there were 108 confirmed cases reported with no deaths according to the latest EMRO update on 15 August 2009, 23:00 Cairo time. All areas in which UNRWA is operating reported confirmed cases of influenza A (H1N1) except the Gaza Strip.

Dr. Ali El-Jaish

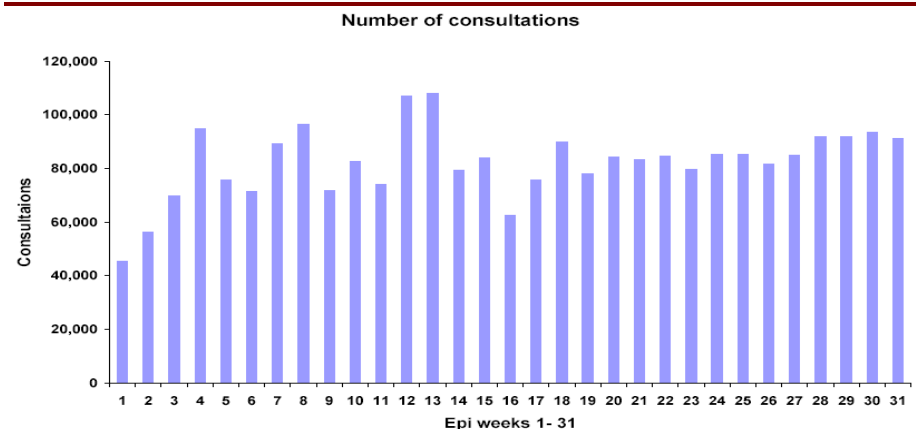
## Weekly Reporting of four major diseases, UNRWA Gaza Strip



## Patient consultations

During epi-weeks 28-31 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.

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



## Notifiable diseases

During weeks twenty eight to thirty one; the epidemiology of watery diarrhoea, acute bloody diarrhoea, viral hepatitis and typhoid fever was fluctuating up and down and it 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, two cases of viral meningitis were reported. Both of them were from Maghazi HC (middle). No epidemiological links were found between the cases reported cases. All needed public health measures (isolation of cases and health education) were taken.

### Class-B Diseases

During the reporting period, five cases of mumps were reported, one case came from Rimal health center (north). another case was reported from Zaitun health center (north) and three cases from Bureij health center (middle). The ages of affected cases ranged from 7-11 years (all were immunized at 15 months). The three cases in Bureij HC 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 (52%), 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 (34%) followed by acute bloody diarrhea (12%). Cases of acute hepatitis (acquired through syndromic surveillance) accounted for 2% 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	
Acute flaccid paralysis	Vaccine Preventable	Other
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

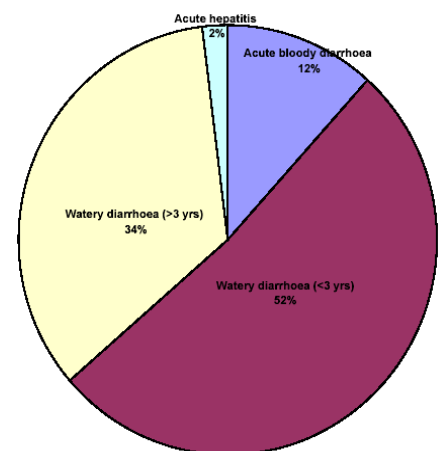
## Reporting of Class-A Diseases, UNRWA Gaza Strip

Class-A Diseases Weeks 28-31 2009	Case count
<b>Acute flaccid paralysis</b>	<b>0</b>
Non polio	0
Poliomyelitis	0
<b>Cholera</b>	<b>0</b>
Suspected	0
Confirmed	0
<b>Meningitis</b>	<b>0</b>
Meningococcal	0
Viral	2
Other	0
<b>Influenza A (H1N1)</b>	<b>0</b>
Suspected	0
Probable	0
Confirmed	0

## Reporting of Class-B Diseases, UNRWA Gaza Strip

Class B diseases Weeks 28-31 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	379
Watery diarrhoea (children below 3 yrs)	1684
Watery diarrhoea (population > 3 yrs)	1114
Gonorrhoea	0
HIV/AIDS	0
Viral hepatitis	62
Typhoid fevers	16
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 a fluctuating trend. No alert/alarm thresholds were breached during the reporting period.

### Watery diarrhoea <3yrs

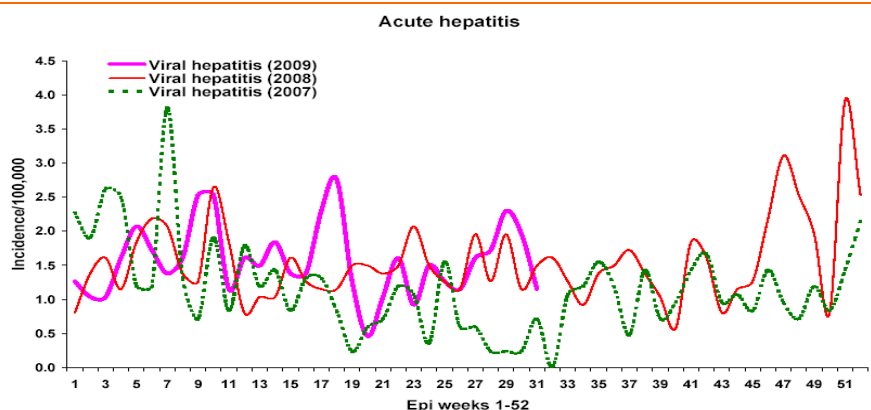
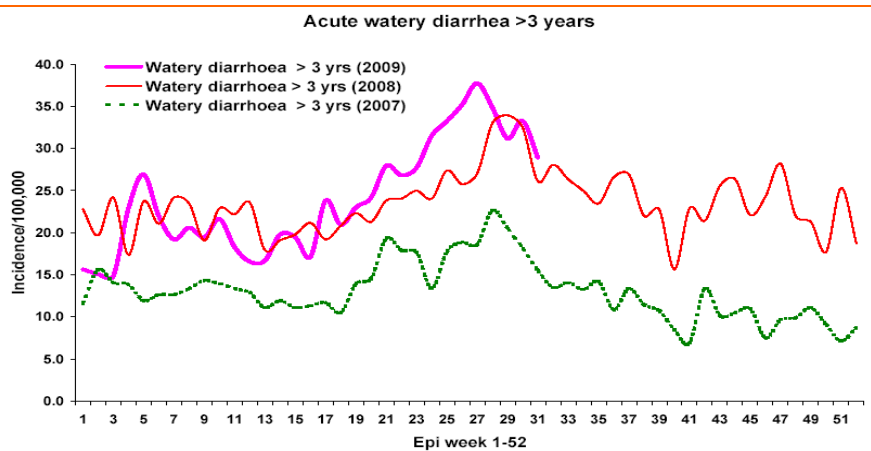
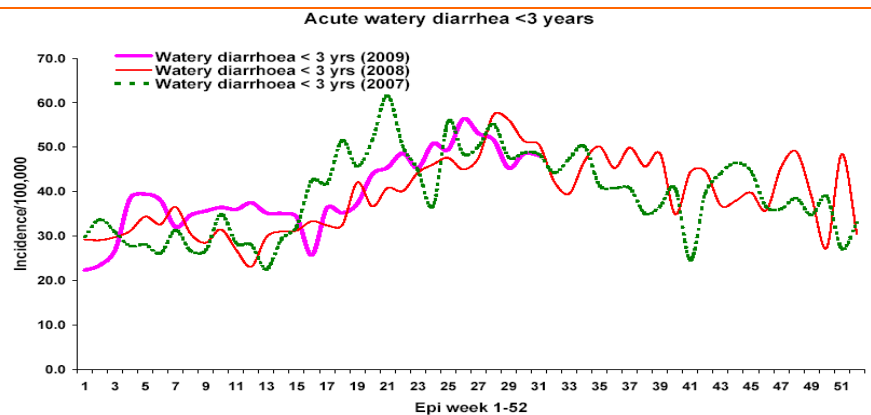
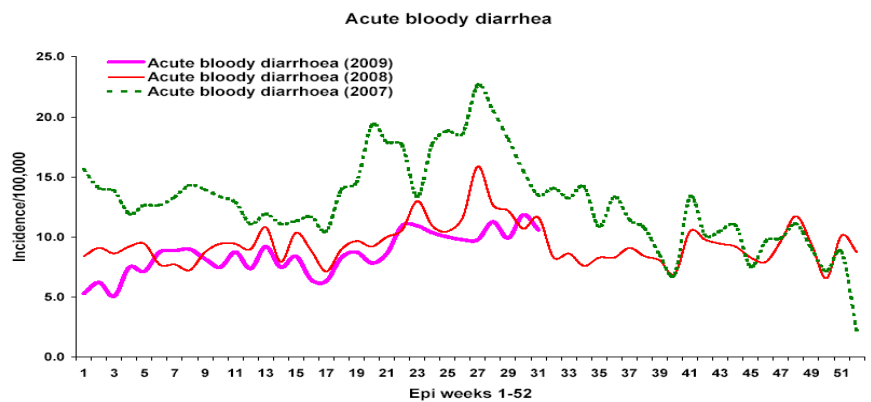
The reported incidence of acute watery diarrhoea in the below three year group showed generally a decreasing trend remaining within seasonal expectations. No alert/alarm thresholds were breached during the reporting period.

### Watery diarrhoea >3yrs

Incidence of watery diarrhoea in the above three years age group shows also a decreasing trend in the reporting period. The reported numbers are within the seasonal range and no clustering was noticed.

### Acute Hepatitis

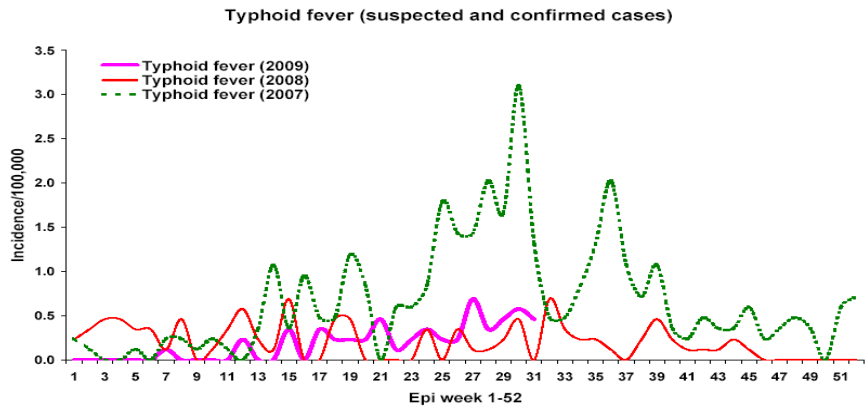
The incidence of acute hepatitis in the reporting period showed a fluctuating trend. There was an increase in week twenty-nine followed by decrease in weeks thirty and thirty-one. Alert/alarm thresholds were not breached.



## Epidemic diseases

### Typhoid Fever

In the reporting period, the incidence of typhoid fever showed a fluctuating pattern. Alert/alarm thresholds were not 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 9<sup>th</sup> of February 2009) .

### Taking home points

During weeks twenty-eight to thirty-one the local epidemiological situation in the Gaza Strip as reported by UNRWA reporting units was relatively uneventful with no evidence of epidemics. No alert/alarm thresholds were breached.

Concerning influenza A (H1N1) pandemic according to the WHO update issued 6 August 2009, there were 177,457 laboratory confirmed cases reported with 1462 deaths (case fatality rate 0.8%). Given the countries are no longer required to test and report individual cases; the number of reported confirmed cases is much less than the actual number of cases.

On a regional level; the last update issued by EMRO on the 15th of August states that there are 2,802 laboratory confirmed cases of influenza A (H1N1) with eight deaths giving 0.3% case fatality rate. 421 of these cases were locally transmitted while the rest were imported.

Locally, there were no reported cases from Gaza Strip. While in the *WB* there were 108 confirmed cases reported with no deaths according to the last EMRO update on 15 August 2009, 23:00 Cairo time. All areas in which UNRWA is operating reported confirmed cases of influenza A (H1N1) except the Gaza Strip.

### Epi intelligence

- **Egypt:** According to the last report published on 11 August; The cumulative number of confirmed cases of avian influenza (influenza A H5N1) is 83. 27 of those have been fatal (ProMED-mail).

314 confirmed cases of influenza A (H1N1) have been reported with one death;

- **Israel:** More than 2,000 confirmed cases of influenza A (H1N1) were reported to WHO by Israel ; but actual number is estimated to be much more larger. There are 5 deaths till now.

- **Syria :** 13 cases of influenza A (H1N1) were reported, no deaths.

**Jordan:** 99 confirmed cases of H1N1 influenza A were reported with no deaths;

- **Iraq:** 96 cases of influenza A

### 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

Dr Ali El-Jaish: [a.el-jaish@unrwa.org](mailto:a.el-jaish@unrwa.org)

Dr Mohammed Maqadma. [m.maqadma@unrwa.org](mailto:m.maqadma@unrwa.org)

Dr Amna El-Shurbasi: [a.al-shurbasi@unrwa.org](mailto:a.al-shurbasi@unrwa.org)