

Highlights

Epidemiological weeks 42-45 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 42-45 of 2009 was 100%;
- The number of consultations in the period 42-45 weeks shows a stationary trend with minor fluctuations, but generally lower than previous weeks.
- 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 forty two-forty five, the morbidity trend of watery diarrhoeas in the <3 years shows a stationary trend with a small increase in week forty five. Watery diarrhoea in the >3 years age group, bloody diarrhoea and hepatitis show a fluctuating trend. Incidence of typhoid is mostly steady in the reporting period.
- **Alert/alarm thresholds were not breached** for any of the major diseases in the reporting period.

Weeks Forty two - Forty five of 2009

Dear Colleagues,

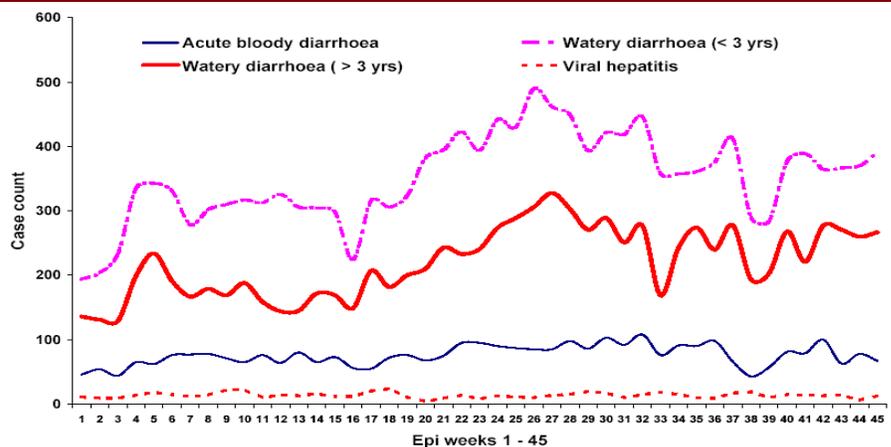
During weeks forty two to forty five, the local epidemiological situation in the Gaza Strip as reported from UNRWA reporting units was relatively uneventful with no evidence of outbreaks.

Concerning influenza A (H1N1) pandemic, the regional situation according to the latest situation in EMRO was reported in the 14th of November 2009, at 23:00 hours, Cairo time. There are 28,751 laboratory confirmed cases of influenza A (H1N1) with 188 deaths; giving 0.6% case fatality rate.

Locally, there were no reported cases from Gaza Strip. While in the WB there were 901 confirmed cases reported with one death according to the last EMRO update. All areas in which UNRWA is operating reported confirmed cases of influenza A (H1N1) except the Gaza Strip.

Dr. Ali El-Jaish

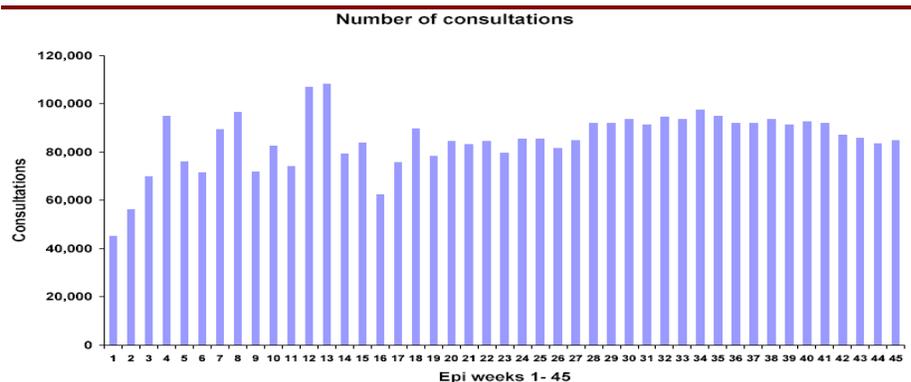
Weekly Reporting of four major diseases, UNRWA Gaza Strip



Patient consultations

- During epi-weeks 42-45 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 week shows a stationary trend with minor fluctuations, but generally lower than previous weeks.

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



Notifiable diseases

During epi-weeks forty two-forty five, the morbidity trend of watery diarrhoeas in the <3 years was stationary with a small increase in week forty five. Watery diarrhoea in the >3 years age group, bloody diarrhoea and hepatitis show a fluctuating trend. Incidence of typhoid is mostly steady in the reporting period. **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, one case of viral meningitis was reported from Maghazi HC. The patient was a 5 year old boy. All needed public health measures including isolation and health education were taken.

Class-B Diseases

During the reporting period, four cases of mumps were reported, two cases came from B/Hanoun health center (north). Another case was reported from Nusierat health center (middle) and the last case from Zaitun health center (Gaza). The ages of affected cases ranged from 4-12 years (all were immunized at 15 months). The cases reported from the three HCs were not geographically clustered and no epidemiological links could be traced. All needed management and public health measures were taken (isolation of cases and health education on disease transmission was provided to contacts).

The majority of non vaccine preventable Class B diseases (50%), 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 (11%). 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

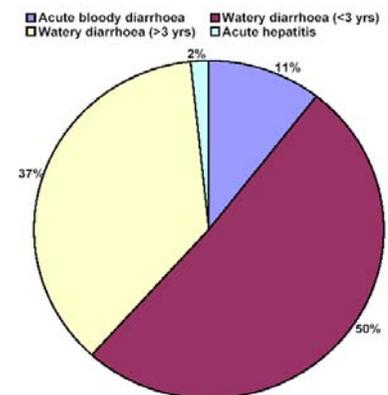
Reporting of Class-A Diseases, UNRWA Gaza Strip

| Class-A Diseases Weeks 42-45 2009 | Case count |
|-----------------------------------|------------|
| Acute flaccid paralysis | 0 |
| Non polio | 0 |
| Poliomyelitis | 0 |
| Cholera | 0 |
| Suspected | 0 |
| Confirmed | 0 |
| Meningitis | 0 |
| Meningococcal | 0 |
| Viral | 1 |
| Other | 0 |
| Influenza A (H1N1) | 0 |
| Suspected | 0 |
| Probable | 0 |
| Confirmed | 0 |

Reporting of Class-B Diseases, UNRWA Gaza Strip

| Class B diseases Weeks 42-45 2009 | Case count |
|---|------------|
| Diphtheria | 0 |
| Measles (Suspected) | 0 |
| Measles (Confirmed) | 0 |
| Mumps | 4 |
| Pertussis | 0 |
| Rubella (Suspected) | 0 |
| Rubella (Confirmed) | 0 |
| Tetanus neonatorum | 0 |
| Brucellosis | 0 |
| Acute bloody diarrhoea | 308 |
| Watery diarrhoea (children below 3 yrs) | 1492 |
| Watery diarrhoea (population > 3 yrs) | 1075 |
| Gonorrhoea | 0 |
| HIV/AIDS | 0 |
| Viral hepatitis | 46 |
| 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 shows a fluctuating trend. The highest point in the epidemiological incidence curve during the reporting period was week 42.

Watery diarrhoea <3yrs

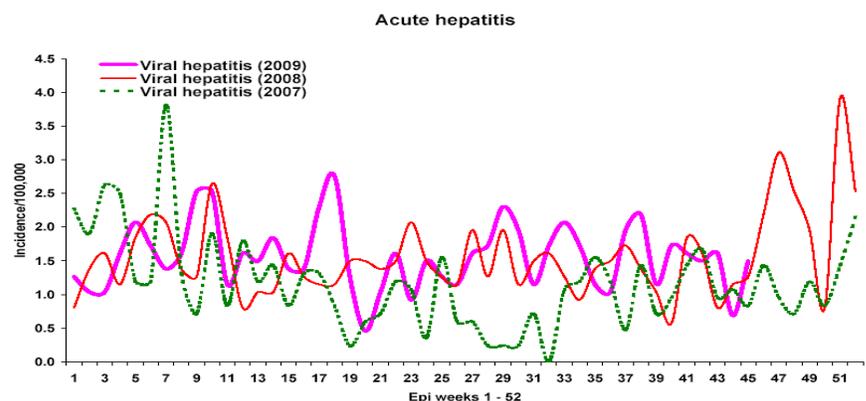
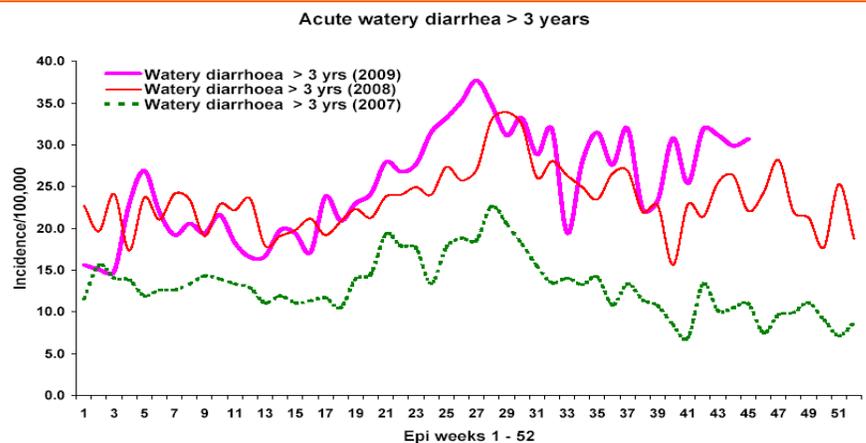
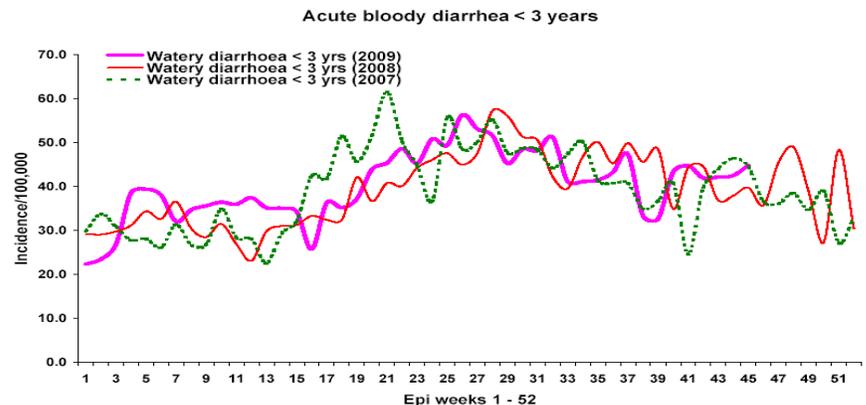
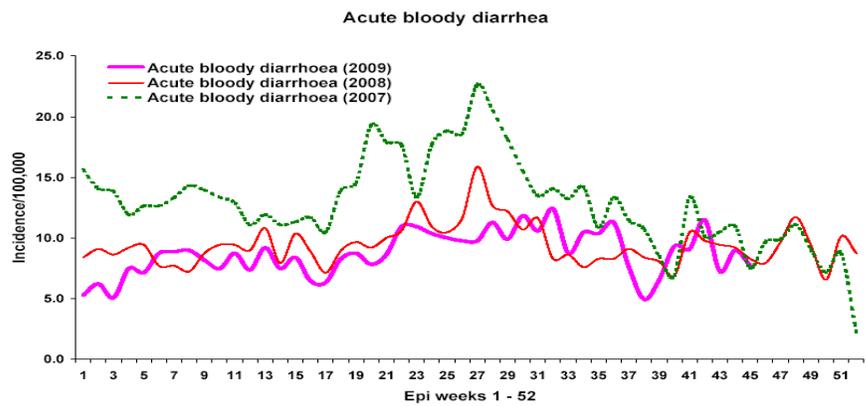
The reported incidence of acute watery diarrhoea in the below three year group showed a relatively stationary trend with a little increase in week 45. No alert/alarm thresholds were breached during the reporting period.

Watery diarrhoea >3yrs

Incidence of watery diarrhoea in the above three years age group showed a decreasing trend from week 42-44 with little increase in week 45. The trend does not suggest any epidemiological significance because the trend is fluctuating up and down, however the incidence is slightly higher than in previous years.

Acute Hepatitis

The incidence of acute hepatitis in the reporting period shows a stationary trend in weeks 42 and 43 followed by a sharp decrease in week 44. Then in week 45 it returned nearly to level of weeks 42 and 43. Alert/alarm thresholds were not breached.

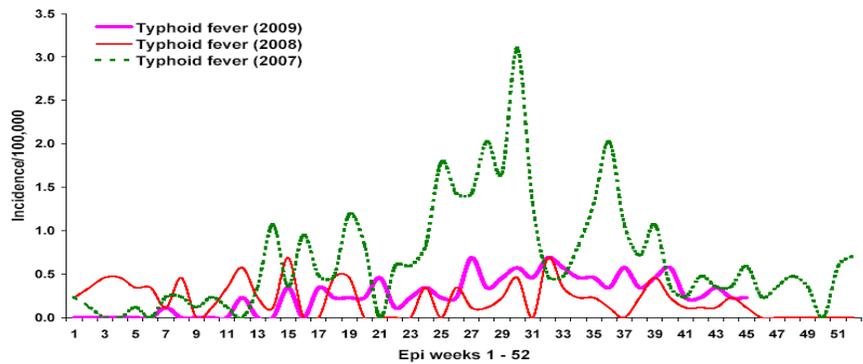


Epidemic diseases

Typhoid Fever

In the reporting period, the incidence of typhoid fever showed a stationary trend with a little increase in week 43. Alert/ alarm thresholds were not breached during the reporting period.

Typhoid fever (suspected and confirmed cases)



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 epi-weeks forty two to forty five, 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 74 issued on 13 November 2009, as of the 8th of November 2009 there were over 503,536 laboratory confirmed cases worldwide with at least 6,260 deaths. Given that countries are no longer required to test and report individual patients, the number actually understates the real disease case count.

On a regional level, the latest situation in EMRO as of the 14th of November 2009, 23:00 hours, Cairo time, states that there are 28,751 laboratory confirmed cases of influenza A (H1N1) with 188 deaths, giving 0.6% case fatality rate.

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Epi intelligence

- **Egypt:** As of 24th September, 2009, the cumulative number of confirmed cases of avian influenza (influenza A H5N1) is 87. 27 of those have been fatal (ProMED-mail). No more cases have been reported since then.

2,494 confirmed cases of influenza A (H1N1) have been reported with 7 deaths**;

- **Israel:** 4,500 confirmed cases of influenza A (H1N1) were reported to WHO by Israel; but the actual number is estimated to be much higher. There have been 39 deaths as of the 16th November 2009.

- **Syria :** 230 cases of influenza A (H1N1) were reported with 22 deaths**.

Jordan: 2,380 confirmed cases of influenza A H1N1 were reported with 4 deaths**;

- **Iraq:** 1,835 cases of influenza A (H1N1) were reported with 9 deaths**.

** Latest EMRO update as of 14th of November 2009.

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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