Introduction: The Pandemic started from Mexico and the United States in early 2009 and affected all the world. The United Arab Emirates was affected from autumn 2009 and went through winter 2010. It had high rate of infection with low mortality. There was more panic spread by the media and the timely preparations helped to control the pandemic, identify the infected cases, isolate and treat the patients and offer prophylaxis to the contacts.

Material and Method: This retrospective data covers a seven months period; First of November 2009 to 31st of May 2010. Altogether, 856 cases were referred to us for diagnosis by sending their nasopharyngeal isolates, for diagnosis. The cases were referred from all primary health clinics of Al Ain, Al Wagan Hospital, Al Ain hospital and Al Mafraq Hospital. The main bulk of cases was from Emergency Department of Tawam Hospital, Al Ain. Although, direct immunofluorescence microscopy and other quick strip test methods were also applied for emergency purposes but all these cases were tested my molecular techniques RT-PCR for specific genes. The test was quickly established and the service remained available uninterrupted.

Out of 856 cases of possible influenza like illness, 236 showed reactivity and were confirmed to be infected by the pandemic strain of H1N1.

Results: The peak of the outbreak occurred in the month of December, 2010. The highest rate of the positivity was in the early days of December 2009 but the number of samples remained high afterwards, with decreasing positivity. This was due to more concern of testing any cases with flu like symptoms and panic in the public. Since January 2010, there was a sharp decline of the cases and then the local cases started disappearing.