A total of 9007 samples from in patients attending Al-Noor Specialist Hospital, Makkah Al-Mukarramah were examined to study the epidemiology and antibiotics sensitivity of Enterobacteriaceae family, during the period 1412-1413H. 13.3% were found positive on culture, out of which 29.7% belonged to the Enterobacteriaceae family. Among the positive samples of this family, 157 were isolated from urine, 69 from blood, 63 from wounds and 68 from the miscellaneous sources. The highest percentage found in nursery followed by medical ward. The percentage of E.coli and Klebsiella isolated was 35.6 and 33.6 respectively. The isolates from community acquired infection (C.A.I) showed high percentage (52.4) than the hospital acquired in. {ection (H.A.I) (47.6). In urine samples, urinary tract infection (U. T.I) isolates were more in female cases than the male cases and E.coli was found the most common organism. In blood culture samples, Klebsiella gave the highest percentage of bacteraemia and H.A.I was more than C.A.I. The mortality in bacteraemia was 43.5% especially in children less than one year. In wounds samples, E.coli and Klebsiella were found to be the most common organism and both having 27% and H.A.I (61.9%) was more than (C.A.I) (38.1%). In miscellaneous sources infections, Klebsiella was found to be at highest percentage (32.4), where C.A.I (60.3) was more than H.A.I (39.7). By using disc diffusion method the effect of 8 antibiotics was tested on the bacteria isolated from urine. It was found that Nalidixic acid, Norfloxacin and Gentamicin were the best antibiotics for urinary isolates. The effect of 15 antibiotics on the bacteria isolated from blood, wounds and miscellaneous sources, showed high sensitivity to Imipenem and Amikacin. On the other hand, the genera of this family were highly resistant to Ampicillin. The isolates from hospital showed high resistance to most antibiotics than that of community. MIC of antibiotics to bacterial growth was estimated by using 8 antibiotics from common groups of antibiotics. The results of MIC90% decreased in case of Norfloxacin, Cefoxitin and increased in case. of Ampicillin, CWaromphenicol and Tetracycline. Klebsiella and Enterobacter isolates showed increased the MIC90% to the most antibiotics. The bacteria isolated from blood samples showed more resistance to antibiotics than that isolated from-other sources.