A crisis mortality year is one in which there is an abnormally high death-rate. For practical purposes a year in which the annual number of burials was one and a half times greater than the moving average over a 20 year period is defined as a minor crisis mortality year, whilst a year with double the moving average is defined as a major crisis mortality year.

In Cleveland the number of both major and minor crisis mortality years progressively increased from the closing decades of the 16th century to reach a peak in the first half of the 18th century. The number of crisis mortality years declined in the second half of the 18th century and by the first half of the 19th century, although infant and child mortality kept general mobidity rates high, crisis mortality was a thing of the past.

	Crisis Mortality in Great Ayton	1600-1812	
Years	Major	Minor	Total
1600-164	9 1	3	4
1650-169	9 3	3	6
1700—174	9 3	4	7
1750—179	9 0	2	2
1800-185	0 0	2	2
Total	7	14	21

It is evident that Cleveland often, although not always, escaped lightly, and sometimes completely from high death rates in years when there was heavy regional and national mortality.

Between 1600—1650 the North Riding suffered intermittently from visitations of 'plague'. This would not necessarily mean bubonic plague but could have meant typhus or some other epidemic disease. At times it was close to Cleveland but generally the Cleveland villages remained relatively unscathed. High national mortality in the early1640s was attributed to typhus arising from troop movements.

Strict quarantine appears to have saved Cleveland from the national outbreak of plague in 1665-66 and locally these years were crisis free years. Crowded urban areas suffered considerably more than scattered rural communities.

Cleveland was demographically unaffected by some of the national and regional subsistence and climatic crises. However during the demographic crisis of the 'seven ill-years of 1693—1699' when there was a scarcity of corn Great Ayton suffered a major crisis in 1693. Other parishes remained relatively untouched. The 'great dearth of 1795—6' produced a minor crisis in Ayton with another in 1801. The situation was probably alleviated by gifts of food and fuel from the Overseers of the Poor and paternalistic landowners.

The period 1679—1684 saw high national mortality. This was mirrored in Cleveland with a regional crisis. Major crises occurred in a number of Cleveland villages in 1680 and in Ayton 21 deaths occurred. In the three years 1680—3 Great Ayton lost 71 individuals. The mortality pattern was not clear, being even throughout the year, possibly indicating problems of subsistence rather than disease.

A subsistence crisis occurred in Cleveland between 1727—1730 possibly accompanied by enteric fever or smallpox in the autumn of 1729. Another year of scarcity, 1737, saw food riots in some parts of the country. Great Ayton suffered 29 deaths with the mortality peaks occurring in the pre-harvest months and there were several further peaks in November and December coinciding with an influenza epidemic.

The most severe and prolonged demographic crisis during the years under consideration hit the district from 1739 to 1743. Three bad winters followed by poor harvests contributed to the crisis. There were 27 deaths in Ayton in 1741.

The mortality was concentrated between April and August and large numbers of children were involved suggesting an epidemic rather than a dearth although the latter must have been a contributory factor. Creighton mentions a typhus epidemic in Rudby and during the whole of the period 1739—41 Wrigley and Schofield suspected the presence of dysentry. This, they believed, had been consistently underestimated as a cause of death during the

summer and early autumn.

Despite good harvests in 1761 and 1762 there was a minor crisis in Ayton in 1762 with 20 deaths.

Ralph Jackson thought the cause in 1762 was influenza but the mortality in 1763, when major crises occurred throughout the district, would appear to have been from a totally different cause as large numbers of children fell victim. Significantly Ralph Jackson's three neices were inoculated against smallpox in March 1763.

Minor crises occurred in neighbouring parishes in 1777 and causes of death included consumption (tuberculosis), chin-cough (whooping cough) and smallpox.

A final outbreak of crisis mortality occurred between 1781—83 and the causes were varied and complex. Creighton refers to the 'summer influenza' but there were also fatalities due to smallpox, consumption and 'fever'. Great Ayton and Carlton escaped fatalities during these three years but Rudby lost 66 inhabitants. In Cleveland 1783 was the last year of widespread crises mortality and the existing evidence suggests that both dearth and disease played a part in the crises.

Reference: Crisis mortality in thirteen Cleveland parishes 1570 – 1850. R P Hastings and M George.