**Appendix A.4. Mortality rates among merchant creditors (from Nightingale 2005) and other sources cited therein**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Death rate merchant creditors (% deceased)** | **Event** | **Population England****(Broadberry et al 2015)** | **Other evidence (1)****General + clergy** | **Other evidence (2)****Range of years** | **Other evidence (3)****Peasants** | **Other evidence (4) Heriots, Winchester manors (Postan and Titow 1958-9)\*\*** | **Other evidence (5)** | **Assumed death rates (per ‘000)** |
| 1270 |  |  | 4.37 | Mortality low amongst priests and Cornish benefices (Ecclestone 1999) | 1270 -13483.6 – 4% males 20+ peasants, Halesowen(Razi 1980)1300-13503.65% for male landless 20+, Wiltshire(Ecclestone 1999)Black Death:Downham, Ely. 1/3 peasants diedDurham Priory manors, 40-46%; Halesowen, Worcs. >50%; Cottishall, Norfolk 50-60%; Cottenham, Cambs. 49%; mid-Essex 45%, Suffolk 45-55%(Hatcher 1994, p.9, n.16) |  |  |  | 35 |
| 1275 |  |  | 4.40 |  |  |  | 35 |
| 1280 |  |  | 4.46 |  |  |  | 35 |
| 1285 |  |  | 4.61 |  |  |  | 35 |
| 1290 |  | Serious death of 1293-95 | 4.75 |  |  |  |  | 30 |
| 1295 |  |  | 4.74 |  |  |  |  | 35 |
| 1300 | < 2% |  | 4.73 |  |  | Heriots1300 = 58 |  | 35 |
| 1305 | 2.27 | 1308-11 enteric infection | 4.72 | Rise in mortality 1308-> | 1306-1920.6% in Essex(Poos 1985) | Heriots 1305 = 781308 = 98(Smith 1991):1307-09 = 511310-11 = 113 |  | 45 |
| 1310 | 8.74 | 1311 Bad harvest | 4.71 |  | 1310-1320 15% populationHalesowen Manor(Razi 1980)1316-17 17% labour force, Wiltshire(Ecclestone 1999) | Heriots1310 = 96 1311 = 102 | Tenants-in-chief 1310-12 10.5% aged 30-50(Russell 1948) | 65 |
| 1315 | 3.49 | 1315-18 famine + agrarian crisis | 4.69 | Heriots 1316-18 = 171famine |  | 100 |
| 1320 | 10.98 | 1315-21 depression whole economy | 4.39 | 1323-48% male landless 20+, Wiltshire(Ecclestone 1999) | Smith (1991):Heriots 1322-4 increase |  | 80 |
| 1325 | 2.98 |  | 4.12 |  | 1327-8 Downham, Ely 50% population(Coleman 1984) | Smith (1991):Heriots 1327 increase |  | 60 |
| 1330 | 3.99 | 1330-1 harvest bad | 4.26 |  | 1330-1High deaths Kent/ Sussex 22% (Mate 1975) |  |  | 70 |
| 1335 | 3.09 |  | 4.41 |  | 1337 Death rate up Halesowen(Razi 1980) |  |  | 60 |
| 1340 | 3.22 | 1343 poor harvest | 4.56 |  |  |  |  | 65 |
| 1345 | 6.131349=34% (creditors) | 1348-9Black Death | 4.72 |  | 1348 57% peasants, young and landless Glastonbury | Heriots 1344-5 Halesowen increase(Razi 1980) | Tenants-in-chief 1349 27%(Ohlin 1974) | 200 |
| 1350 | 10.50 |  | 3.20 |  |  |  |  |  | 100 |
| 1355 | 2.51 |  | 2.59 |  |  |  |  |  | 50 |
| 1360 | 6.70 | 1361-2 Plague (children worst affected) | 2.57 | 1362-314% beneficed clergy York(Russell 1948) |  |  |  | Tenants-in-chief age 30-39 14%(Ohlin 1974) | 100 |
| 1365 | 2.45 | 1369 Plague | 2.55 | 136913% beneficed clergy York(Russell 1948) |  |  |  |  | 65 |
| 1370 | 3.83 |  | 2.53 |  |  |  |  |  | 70 |
| 1375 | 4.93 | 1375 Plague #1379-83 epidemic # | 2.51(1377=2.5m) |  | 1375 Inquisitions post mortem 12.5%(Russell 1948) |  |  | 1375 Tenants, Worcester 12.5%(Dyer 1980) | 80 |
| 1380 | 3.71 |  | 2.44 |  |  |  |  |  | 70 |
| 1385 | 4.08 |  | 2.35 |  |  |  |  |  | 75 |
| 1390 | 3.01 | 1389-93 epidemic # | 2.26 |  |  |  |  |  | 60 |
| 1395 | 1.60\* |  | 2.17 |  |  |  |  |  | 40 |
| 1400 | 3.04\* | 1400 epidemic # | 2.09 | C15th monks3.31%(Hatcher 1986)Westminster monks 3 – 4 %(Harvey 1993)But maybe too high? TB in institutions? |  |  |  |  | 45 |
| 1405 | 4.54\* | 1405-7 epidemic # | 2.07 |  |  |  |  | 60 |
| 1410 | 3.46\* | 1413 epidemic # | 2.06 |  |  |  |  | 50 |
| 1415 | 5.96\* |  | 2.05 |  |  |  |  | 70 |
| 1420 | 3.47\* | 1420 epidemic # | 2.04 |  |  |  |  | 45 |
| 1425 | 1.73\* | 1427 epidemic # | 2.03 |  |  |  |  | 40 |
| 1430 | 4.76\* | 1433 epidemic London | 2.02 |  |  |  |  | 60 |
| 1435 | 5.00\* | 1438-9 # | 1.99 |  |  |  |  | 65 |
| 1440 | 2.17\* |  | 1.96 |  |  |  |  | 40 |
| 1445 | 4.00\* | 1446-7 epidemic # 1448-9 | 1.93 |  |  |  |  | 50 |
| 1450 | 3.70\* |  | 1.90 |  |  |  |  | 45 |
| 1455 | 0\* | 1457-8 epidemic # | 1.93 |  |  |  |  | 35 |
| 1460 | 1.09\* | 1463-4 epidemic #x | 1.96 | 1463-4 Colchester high mortality |  |  |  | 35 |
| 1465 | 4.21\* | 1466 epidemic in London1467 epidemic #1463-7 plague? X | 1.99 |  |  |  | 1465 Bishop Winchester’s tenants Hartlebury high mortality(4.5 x normal rate) (Dyer 1980) | 50 |
| 1470 | 0.81\* | 1471 epidemic #x | 2.02 |  | 1470sHigh mortality from wills(Gottfried 1978) |  |  |  | 40 |
| 1475 | 0\* | 1479-80 epidemic # x | 2.05 |  |  |  | 40 |
| 1480 | 0\* |  | 2.08 | Population may have stopped declining? Lower mortality children(Gottfried vs Hatcher)  |  |  |  | 30 |
| 1485 | 0\* | 1485 epidemic #x | 2.11 |  |  |  | 30 |
| 1490 | 0.72\* |  | 2.14 |  |  |  |  | 35 |
| 1495 | 0.65\* |  | 2.17 |  |  |  |  | 35 |
| 1500 | 0\* |  | 2.20 |  | Population starts to grow again |  |  |  | 30 |
| 1505 | - |  | 2.24 |  |  |  |  | 30 |
| 1510 | - |  | 2.27 |  |  |  |  | 30 |
| 1515 | - |  | 2.30 |  |  |  |  |  | 30 |
| 1520 | 1.27\* |  | 2.34 | 1520s Mortality crises severe (Hatcher) |  |  |  | 1520s-1530sTenants Worcester 2 – 3% (Dyer 1980) | 40 |
| 1525 | 0\* |  | 2.42 |  |  | 35 |
| 1530 |  |  | 2.55 |  |  |  | 30 |
| 1535 |  |  | 2.68 |  |  |  | 30 |
| 1540 |  |  | 2.82 |  |  |  |  |  | 25 |
| 1541-1550 | Wrigley et al25-30(highest 40) |  |  |  |  |  |  |  |  |

Notes:

\*Creditors increasingly from London but thought to introduce only limited bias

# epidemic of national / large scale, as identified by Hatcher, J (1994) “England in the aftermath of the Black Death”, *Past and Present*, 144, pp.3-35.

x After 1460s frequency of mortality crises on a national scale much diminished.

\*\* Heriot: death duty paid by villeins (serfs) and free tenants to their lord, often dead man’s best beast or chattel.

Source: Pamela Nightingale (2005) ‘Some new evidence of crises and trends of mortality in late medieval England’, *Past and Present*, 187, May, pp.33-68 (table p.53). Other evidence from sources quoted in Nightingale (2005)