**Appendix 1** Excess risk of Non Accidental Death, Cardiovascular Death and Respiratory Death by HW1



**Appendix 2** Excess risk of Non Accidental Death, Cardiovascular Death and Respiratory Death by HW2



**Appendix 3** Cumulative Excess Risk of Non Accidental Death in Dezful based on age and sex

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | HW effect | Lag0 | Lag 0-2 | Lag 0-6 | Lag 0-13 |
| Age group | <15 | ME\* | HW1 🞟 | 12.07(-10.89 40.95) | 26.51(-20.79 83.05) | 29.51(-53.10 124.81) | 10.48(-137.22 178.75) |
| HW2 🞟🞟 | 19.64(-21.29 81.88) | 56.63(-32.89 180.67) | 121.92(-43.89 337.37) | 211.28(-89.47 593.40) |
| AE\*\* | HW1 | 5.02(-3.63 14.44) | 11.23(-6.56 30.26) | 13.05(-18.37 46.20) | 5.33(-51.96 65.47) |
| HW2 | 13.38(-12.51 46.95) | 37.88(-17.88 106.12) | 79.00(-23.08 199.06) | 131.80(-53.55 346.81) |
| 15-64 | ME | HW1 | 4.66(-3.27 13.26) | 12.21(-4.34 29.82) | 20.43(-8.93 51.26) | 14.04(-38.60 69.07) |
| HW2 | 11.48(-4.43 30.06) | 27.47(-6.12 65.38) | 36.94(-22.56 102.52) | 6.73(-96.86 119.91) |
| AE | HW1 | 1.97(-1.01 5.06) | 5.10(-1.13 11.48) | 8.34(-2.72 19.63) | 5.84(-14.25 26.29) |
| HW2 | 7.55(-2.31 18.42) | 18.06(-2.76 40.51) | 24.27(-12.81 63.66) | 5.22(-60.33 74.50) |
| 65-74 | ME | HW1 | 4.40(-7.27 17.54) | 8.77(-15.65 35.57) | 7.92(-35.27 54.42) | 16.36(-62.60 100.80) |
| HW2 | 8.72(-13.62 36.85) | 25.73(-22.60 83.58) | 52.73(-35.48 154.57) | 51.83(-103.71 229.10) |
| AE | HW1 | 1.62(-2.82 6.29) | 3.12(-6.20 12.79) | 2.36(-14.20 19.40) | 5.85(-24.27 36.95) |
| HW2 | 5.41(-8.70 21.72) | 15.61(-14.65 49.47) | 31.21(-23.77 91.36) | 31.85(-66.34 138.41) |
| >=75 | ME | HW1 | 5.20(-2.56 13.58) | 10.83(-5.24 27.90) | 9.21(-18.94 38.74) | -4.61(-55.37 48.39) |
| HW2 | **15.84\*\*\*****(0.47 33.57)** | **32.53\*\*\*****(0.67 68.17)** | 29.25(-25.76 89.50) | 6.79(-89.71 111.57) |
| AE | HW1 | 1.67(-1.23 4.66) | 3.62(-2.41 9.80) | 3.42(-7.25 14.30) | -2.55(-22.04 17.25) |
| HW2 | **9.47\*\*\*****(0.14 19.67)** | **19.91\*\*\*****(0.41 40.81)** | 18.94(-15.28 55.15) | 4.00(-56.79 67.99) |
| Sex | Male | ME | HW1 | 5.71(-0.59 12.42) | **13.56\*\*\*****(0.48 27.27)** | 19.01(-3.98 42.91) | 16.06(-25.31 58.89) |
| HW2 | **17.83\*\*\*****(4.58 32.75)** | **39.61\*\*\*****(12.15 69.77)** | 47.18(-0.30 98.42) | 29.60(-53.05 118.13) |
| AE | HW1 | 2.33(-0.01 4.73) | **5.55\*\*\*****(0.67 10.52)** | 7.86(-0.77 16.62) | 6.84(-8.86 22.76) |
| HW2 | **11.25\*\*\*****(3.27 19.84)** | **25.23\*\*\*****(8.59 42.86)** | **30.53\*\*\*****(1.35 61.12)** | 20.26(-31.35 74.12) |
| Female | ME | HW1 | 3.28(-4.10 11.23) | 6.38(-8.97 22.66) | 3.87(-23.30 32.32) | -3.05(-52.54 48.55) |
| HW2 | 5.08(-9.03 21.40) | 14.56(-15.68 48.41) | 27.28(-27.53 87.25) | 12.49(-84.65 117.96) |
| AE | HW1 | 1.09(-1.70 3.98) | 2.17(-3.65 8.14) | 1.31(-9.06 11.88) | -2.32(-21.36 17.01) |
| HW2 | 2.83(-6.06 12.59) | 8.52(-10.46 28.91) | 16.85(-17.55 53.24) | 5.94(-55.58 70.72) |
| Labels: ME\*: Main effect, AE\*\*: Added effectBold typeface with\*\*\*: Indicates statistical significance at p<0.05. HW1🞟: Heat wave1,  HW2🞟🞟: Heat wave2 |