

## Contact Hour Infection Rate Threshold Grid

Richard Fiene, Ph.D.

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The below grid provides the potential contact hour infection rate thresholds when we compare the amount of time and the number of individuals in a particular area. It is color coded moving from Blue to Red. Blue indicates the lowest threshold = 0 since there is no contact with anyone, in other words the person is alone by themselves. The contact hours go up as the time increases and the number of individuals increases. The higher the contact hours and the greater the chance of the infection spreading. It is being suggested that contact hours be used rather than the group size because contact hours takes the number of individuals into account (Vertical Axis) as well as the amount of time (Horizontal Axis) they are together.

| High | 10 | 10 | 20 | 30    | 40   | 50    | 60 | 70 | 80 | 90 | 100 |
|------|----|----|----|-------|------|-------|----|----|----|----|-----|
|      | 9  | 9  | 18 | 27    | 36   | 45    | 54 | 63 | 72 | 81 | 90  |
|      | 8  | 8  | 16 | 24    | 32   | 40    | 48 | 56 | 64 | 72 | 80  |
|      | 7  | 7  | 14 | 21    | 28   | 35    | 42 | 49 | 56 | 63 | 70  |
|      | 6  | 6  | 12 | 18    | 24   | 30    | 36 | 42 | 48 | 54 | 60  |
| Num  | 5  | 5  | 10 | 15    | 20   | 25    | 30 | 35 | 40 | 45 | 50  |
|      | 4  | 4  | 8  | 12    | 16   | 20    | 24 | 28 | 32 | 36 | 40  |
|      | 3  | 3  | 6  | 9     | 12   | 15    | 18 | 21 | 24 | 27 | 30  |
|      | 2  | 2  | 4  | 6     | 8    | 10    | 12 | 14 | 16 | 18 | 20  |
| Low  | 1  | 1  | 2  | 3     | 4    | 5     | 6  | 7  | 8  | 9  | 10  |
|      | 0  | 1  | 2  | 3     | 4    | 5     | 6  | 7  | 8  | 9  | 10  |
|      |    |    |    | <---- | Time | ----> |    |    |    |    |     |

The lower the contact hours, the better because it obviously decreases the chances of the spread of infection. The Green and Yellow demonstrate this while the Orange and Red contact hours do not and should be avoided. These levels could be used to advise group gatherings related to the potential spread of the COVID19 Virus which may be more effective than just addressing group size.