

PROJECTED TRIAGE CENTER NEEDS

7/10/06

PROJECTED ILLNESS RATE IN A COMMUNITY (DRAW AREA)

Total per 3 months: N (number of community or draw area members) $\times 0.333$

Total first or second month: $N_{1,3} = N \times 0.02$

Total second month: $N_2 = N \times 0.3$

PROJECTED HOSPITALIZATIONS

Total per 3 months: $N \times 0.006$

Total first or third month: $N \times 0.0013$

Total second month: $N \times 0.0034$

PROJECTED DEATH RATE (D) (total per 3 months):

$D = N \times 0.0025$

PROJECTED PEAK EXPECTED NUMBER OF PATIENTS PER TRIAGE SITE PER 24 hours (P):

(identical to a number of surgical masks, per day)

Total per three months: $P_t = (N \times 0.333) \times 2.333 / d$ (number of days in a given month)

Total first or third month: $P_{1,3} = N_{1,3} \times 2 / d$

Total second month: $P_2 = N_2 \times 3 / d$

PROJECTED MINIMAL STAFFING NEEDS (FTE) PER TRIAGE CENTER PER 12hour shift (S):

(round up to a full FTE for numbers less than 2; plan for peak morning/ daytime hours; center open 24 hours a day; plan for additional surge capacity by multiplying any given FTE result by a factor of 2-3; cumulative number of all staffing needs per day equals the number of N95 masks needed per day)

Law enforcement $S_{le} = (P_2 / 12) / 50$

Crowd control $S_{cc} = (P_2 / 12) / 25$

Triage (front desk) $S_{tr} = (P_2 / 12) / 8$

Nursing (direct care) $S_{nu} = (P_2 / 12) / 10$

Providers (direct care) $S_{pr} = (P_2 / 12) / 30$

Logistics /supplies $S_{lo} = P_2 / 100$

Administration $S_{ad} = P_2 / 100$

Phone $S_{ph} = (P_2 / 12) / 50$

EXAMPLE: How many FTE nurses will be needed for the Quincy Triage Center (George, Vantage area, Quincy, 1/2 Winchester area, Crescent Bar)?

$$\begin{aligned} S_{nu} &= (P_2 / 12) / 10 = (((N_2 \times 3) / d) / 12) / 10 = N \times 0.3 \times 3 / d / 12 / 10 = \\ &= 12,000 \times 0.3 \times 3 / 30 / 12 / 10 = 3.2 \text{ FTE (x2 for surge capacity)} \\ &= \mathbf{6.4 \text{ FTE}} \end{aligned}$$

PROJECTED PEAK INTRAVENOUS FLUIDS (F) (1 liter bags PER DAY) NEEDS:

$F = P_2 \times 0.034$ (five times hospitalization rate $\times 2$ bags)