

Table 2: Sample Calculations for Estimating Health Care Personal Protective Equipment Needs During a Pandemic Event

Use	Calculation	Calculation Example
Masks (surgical or procedure) for individuals presenting for evaluation over the course of the pandemic	One mask per patient	Anticipate 3000 individuals seeking health care = 3000 masks
Masks (surgical or procedure) for inpatients	Number of inpatients estimated, one mask per day X +/- 7 days	Anticipate 400 to 500 inpatients X 1 (mask per day) X 7 days = 2800 to 3500
Respirators (i.e.: N95) for health care workers	4 respirator changes per day X number of health staff in patient care roles X duration of pandemic waves	4 respirator changes per day X number of staff in patient care roles X duration of pandemic waves (~180 days, anticipating two waves at 90 days each) = 720 respirators per health care worker in care area*
Respirators (i.e.: N95) for other potentially exposed health care support staff (security, housekeeping staff etc.)	2 respirator changes per day X number of staff in potential exposure roles X duration of the pandemic waves	2 respirator changes per day X number of staff in potential exposure roles X duration of the pandemic waves (~180 days) = 360 respirators per health care worker supporting activities in care area*

***Notes:**

- Calculations are recommended estimates only
- Mask / respirator type should be determined by reasonably anticipated role, exposure potential and current recommendations
- When resources are limited and choices have to be made to purchase personal protective equipment, masks, if properly worn, are likely to be the most effective intervention to limit the spread of pandemic influenza
- While it is not anticipated that the same staff member will be working every day throughout the pandemic, staffing mix in and supporting the care area may remain relatively constant throughout the pandemic and this staffing mix can be used to calculate need. A facility may have a large number of staff, but not all staff is working at the same time.
- When estimating amount of gloves, soap / hand sanitizer needed, consider estimating a 50% increase in current usage.
- Non disposable goggles should be cleaned and disinfected as per manufacturer guidelines. Considering purchasing 1 goggle per employee who will be working directly in the patient care area, or who may be in the patient care area in support roles.
- Gowns or aprons should be worn by those who will have close and direct patient contact. Amount needed may be based on a 50% or more increase in current usage.