FACE COVERING EFFICIENCY MATRIX

Type of Face	% Reduction in Infection in State				
covering	Example	Typical Spec	30 seconds	20 minutes	Use Parameters
N99 mask or respirator		Face guard & filter cartridges	99%	94%	Multiple use with disinfection
N95 mask		Nose bridge & facial seal	83%	58%	Multiple use with disinfection
Surgical mask		3-ply	83%	58%	Single Use
N95 mask with respirator valve		Nose bridge & facial seal	Self 83% Neighbor 0%	Self 58% Neighbor 0%	NOT RECOMMENDED
Hybrid mask (homemade)		1- to 3 ply	44 to 83%	24 to 58%	mix of cotton with chiffon, flannel or silk; multiple use with washing
Bandana		1-ply	44%	24%	Multiple use with washing
Buff/Neckup		2-ply	44%	24%	Multiple use with washing
Scarf		1- to 3 ply	44%	24%	Multiple use with washing
No face covering		no-ply	0%	0%	NOT RECOMMENDED

NOTES:

^{* %} reduction assessment based on pre-publication paper submitted to Journal of Hospital Infection "COVID-19 & Non Traditional Mask Use: How do Various Materials Compare" https://doi.org/10.1016/j.jhin.2020.05.036

^{**} efficiency dependent on mask donning/doffing, mask fit, and other user determined factors