Masks and COVID-19

What Makes an Effective Mask?

- An effective mask has both good fit and good filtration.
- Well-fitted masks have no gaps between the face and mask, such as above the nose or at the sides.
- You can get good filtration with the right materials and by using more layers. Regardless of mask type, it is only effective if it is worn over the nose and mouth.

Cloth Masks

Effective cloth masks have:
- Two layers of tightly woven cotton with a third layer of non-woven fabric. The third layer could be a mask filter insert, or a synthetic fabric such as polypropylene.
- Nose wires to reduce gaps from the nose.
- Adjustable ear loops or straps that go around the head to reduce gaps from the face.
- Multiple layers of tightly woven, breathable fabric.
- Blocks light from coming through if held up to a bright light source.

Medical Masks

Look for masks with the following:
- Three layers of non-woven material.
- An adjustable nose bridge.
- Surgical masks with ties to provide a closer fit than nonadjustable ear loops.
- Passed ASTM F2100; ASTM F2100 level 2 rating for higher filtration efficiency (American Society for Testing and Materials).

KN95 and KF94 Masks (Respirators)

- CDC recommends finding a KN95 that has been tested by NIOSH and has a minimum “filtration efficiency” of 95% or higher.
- Almost all KN95s and KF94s have ear loops. Respirators with ear loops often provide a worse fit than respirators with head straps (such as N95s), depending on head size and ear loop design.

Double Masking

- Wearing a close-fitting cloth mask on top of a surgical/disposable mask can improve fit and filtration.
- Do not layer two medical masks, wear a medical mask on top of a KN95, KF94, or N95, or wear more than two masks at one time.

Options to Improve Mask Fit:

Nose Wires: Use cloth or medical procedure masks that have a nose wire (a metal strip along the top of the mask) to help prevent air leakage at the top of the mask. Nose wires can also help to prevent fogging of eyeglasses. To get a good fit, make sure to bend the nose wire over your nose to conform to your face.

Mask Fitters and Braces: These devices can be used over a medical procedure mask or a cloth mask to improve the fit by helping to reduce air leakage from around the edges of the mask.

Knotting and Tucking: This technique can be used to improve the fit of a medical procedure mask. Knot the ear loops of the mask where they join the edge of the mask, then fold and tuck the unneeded material under the edges.