KENTUCKY STATE UNIVERSITY COOPERATIVE EXTENSION | FACT SHEET

Information about the Kentucky State University Cooperative Extension Program 2020

Fabric and Technical Considerations for Constructing Cloth Face Coverings

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The Center for Disease Control (CDC) and public health officials in Kentucky have strongly recommended that individuals wear cloth face coverings or masks when leaving their homes, regardless of whether they have fever or symptoms of COVID-19. **This is because of evidence that people with COVID-19 can spread the disease, even when they do not have any symptoms.** Though the majority of Kentuckians can use cloth face coverings, the following groups are excluded from their use:

- Young children under age 2.
- Anyone who has trouble breathing.
- Anyone who is unconscious, incapacitated.
- Anyone who is unable to remove the mask without assistance.

It is recommended that each person has 3-5 masks. Depending on occupation or level of activity, more cloth masks may be needed. A clean mask should be used with each trip outside of the home. A trip to the doctor requires a clean mask and another mask should be used to the grocery store. The previous examples indicate how easily multiple cloth masks are needed on a typical day. Though cloth masks may be purchased, the cost may be a financial hardship.

In the midst of Covid-19, many of the supplies required to create cloth masks are a challenge to secure for various reasons including: lack of supplies (like fabric, elastic, thread and bias tape), delays in delivery of supplies ordered from online retailers, and higher prices on mask supplies due to increased demand. To meet your family's need for masks and save money, consider upcycling fabrics from your apparel and home textiles.

Types of Fabrics to Upcycle for Cloth Face Coverings

Fabrics that may be used to make cloth face covering are those with the following characteristics:

- Tightly woven (knit fabrics should be avoided)
- The fabric should look solid. If you see light through the fabric when holding it up to a light source, the fabric should not be used for masks.
- Fabric should be made from 100% cotton, if possible.

Examples of Clothing and Home Textiles for Upcycled Cloth Masks

Cotton Jeans - The type of fabric used to make jeans is denim. Denim fabrics are made from cotton yarns woven into a tight twill weave. Upcycled denim is ideal to use as the outer layer of a mask. Denim jeans that are not ripped and have intact fabric should be used. When upcycling jeans for this purpose, do not use the waistband, pockets, zippers or seams. Those areas are thick and difficult to sew.

Cotton dress shirts - Cotton dress shirts that are made from plain weave and sateen weave fabrics are good options for upcycled cloth face coverings. Cuffs, collars, and plackets with buttons should not be used.

Flannel - A lining cotton flannel provides soft comfort to the face, and the napped surface aids in filtration.

High thread count (600 +) bed sheets - High thread count bed sheets which are 100% cotton are also good to upcycle for cloth face coverings. The elastic in fitted sheets can also be upcycled to make elastic ear straps. Flat bed sheets supply fabric yardage at the following rate based on their sizes.

Flat Sheets Fabric Yardage Based Upon 60-Inch Wide Fabric

Twin	2 2/3 yards
Full	3 ½ yards
Queen	4 ½ yards
King	5 yards

Fit of Cloth Face Coverings

Although there are several designs available for constructing cloth face coverings, it is important to achieve a snug fit without large gaps. Any gaps, around the nose for instance, from an ill-fitting mask will greatly reduce its effectiveness up to 50-60%. There are multiple studies that support the use of

cloth masks to potentially provide protection against the transmission of germs and viruses. Cotton fabrics that provide filtration can be used to create highly functional cloth face coverings at home. As many businesses, healthcare facilities, and other entities are requiring masks for entry. It is important to secure them in a way that is efficient and cost effective.

References

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