## MAMMOTH CROSSWORD

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## Do at-home UV sterilizers really work?

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illness and recovery. Get better.
emma jones
With the holiday season comes an arsenal of gimmicky products that tend to lean more to the fun side than functional. In the pan-
demic era, this had led to an indemic era, this had led to an in
flux of phone holders and handflux of phone holders and hand-
held wands that claim to sterilize phones, wallets and even groceries with UV light. But do they work? Specific wavelengths of light can
damage nucleic acids or protein damage nucleic acids or protei
and are effective in killing certain viruses and bacteria. However,
these lights have to be fairly concentrated to kill pathogens, which is both difficult and expensive to
create in smaller home devices. Humans are also susceptible o UV damage and lights that are strong enough to kill viruses can cause burns, eye damage and skin cancer. Health Canada recently reeased an alert warning consumers about UV lights and wands for received any evidence to demonreceived any evidence to demon-
strate that UV lights can protect
specifically against COVID-19."

The public health body also noted there is currently no proof that
UV lights are effective against COVID-19 and "should not be tion measures such as frequent hand washing, physical distancing, mask-wearing and cleaning UVlightsalsoneed to be of strons enough to kill pathogens. If the device doesn't have enough power, if
the bulb is starting to burn out or if the device isn't focused on the area for alongenough period of time, it
won't be effective won't be effective.
In the UV spectrum, UVA is the In the UV spectrum, UVA is the
longest wavelengths, from 320 longest wavelengths, from 320
to 400 nanometres ( nm ), and is
known to cause some cell damage nnown to cause some cell damage cell damage can cause wrinkles and sunspots and may have an indirect effect ondeveloping some forms of skin cancer. UVB is more intense,
and can cause burns, eye damage and can also damage protein and DNA in cells. UVB radiation from the sun is what causes sunburns.
UVC, also known as sermicid. UVC, also known as germicidal
V (200 to 280 nm ) is even more (200 to 280 nm ), is even more
potent and can severely damage proteins and DNA in cells. If a hutan is exposed to concentrated
VC light for even a few second UVC light for even a few seconds,
hey can come away with burns and eye damage
Healthing.ca


84 Across


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