## HMRC Technical Note of Kwan-Jin Jung, Ph.D.

## Subject: Susceptibility artifacts from mascara on the eyelash

- 1. Mascara
  - The black dye in mascara is known to have magnetic susceptibility in the same way as in the black ink.
  - Therefore, it induces magnetic susceptibility around the eyes resulting in signal void and geometric distortion of surrounding tissues.
  - In addition, it could have heating as in the tattoo.





2. Comparison of effects on MPRAGE: without vs. with mascara





3. Comparison of effects on fieldmap and EPI: without vs. with mascara

