“Safeguarding the health of the NASA astronaut community: The need for expanded medical monitoring for former NASA astronauts under the Astronaut Occupational Health program”

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The astronaut community is unique, and may be disproportionately exposed to occupational hazards not commonly seen in other communities. The extent to which the demands of the astronaut occupation and exposure to spaceflight-related hazards affect the health of the astronaut population over the life course is not completely known.

Provision of health screening services to active and former astronauts ensures individual, mission, and community health and safety. Currently, the NASA-Johnson Space Center (JSC) Flight Medicine Clinic (FMC) provides extensive medical monitoring to active astronauts throughout their careers. Upon retirement, astronauts may voluntarily return to the JSC FMC for an annual preventive exam. However, current retiree monitoring includes only selected screening tests, representing an opportunity for augmentation.

The potential latent health effects of spaceflight demand an expanded framework of testing for former astronauts. The need is two-fold: screening tests widely recommended for other aging communities are necessary for astronauts to rule out conditions resulting from the natural aging process (e.g., colonoscopy, mammography), as opposed to conditions resulting directly from the astronaut occupation; and increased breadth of monitoring services will improve the understanding of occupational health risks and longitudinal health of the astronaut community, past, present, and future.

To meet this need, NASA has begun an extensive exploration of the overall approach, cost, and policy implications of expanding existing medical monitoring under the Astronaut Occupational Health program for former NASA astronauts.

Word Count: 229 (250 maximum)

Learning Objectives:

1. Describe the unique effects of the astronaut occupation on the health of astronauts.
2. Identify the current monitoring services provided to retired astronauts.
3. Discuss the need for expansion of existing medical monitoring for retired astronauts.
4. Describe some efforts NASA has begun to meet the need for expanded medical monitoring of retired astronauts.