



National Aeronautics and Space Administration

Smoking Is Cool, Right?

Should NASA Care About Smoking?

October 2, 2017

Dr. Vince Michaud

Deputy Chief Health and Medical Officer



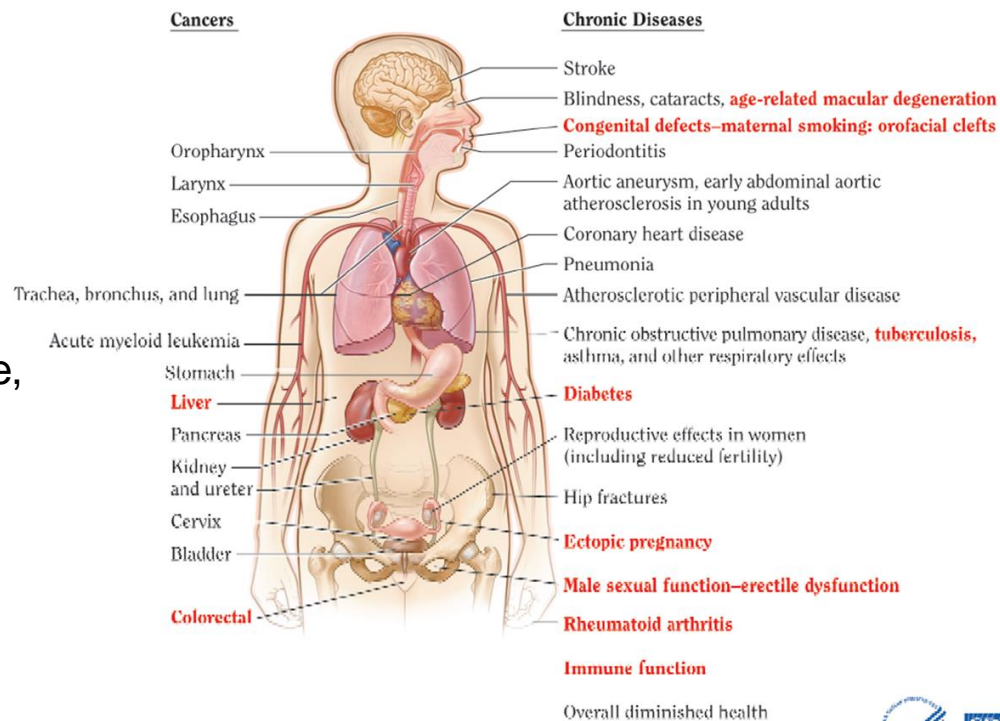
This and previous presentations are archived at
<https://sma.nasa.gov/safety-messages>

Personal Risks from Smoking

- Smoking risks are more deadly than 50 years ago
 - Cigarette smoke contains harmful chemicals such as nicotine, tar, carbon monoxide, formaldehyde, ammonia, hydrogen cyanide, arsenic, Dichlorodiphenyltrichloroethane, etc.
 - Over 7,000 chemical compounds
 - At least 70 CAUSE CANCER

Risks from Smoking

Smoking can damage every part of your body



Smoking Is Harmful



Cost of smoking

Individual Costs

- Smoking causes about 1 out of 5 deaths in the United States annually
- Smoking kills more Americans than alcohol, car accidents, HIV, guns, and illegal drugs combined
- Secondhand smoke: There is no risk-free level of exposure
- Smoking may alter DNA for up to 15 years after quitting

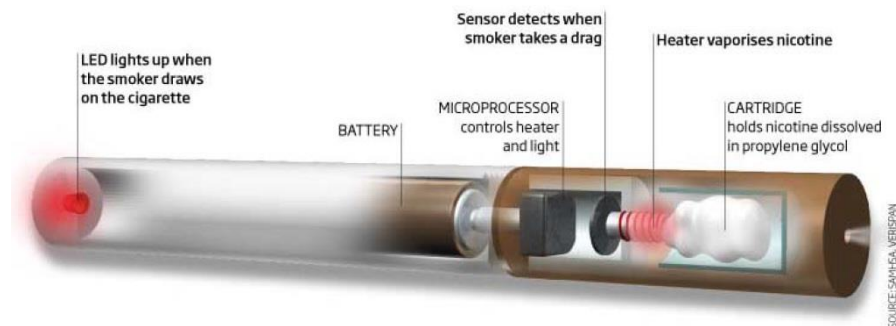
NASA's Costs

- Employers lose an average of \$4,056 in productivity every year per smoker
 - Smoke breaks
 - Time for health care needs
- NASA may lose \$23 million in productivity per year

Smoking Is Costly to Individuals and Organizations

E-cigarettes

- More than 3 in 4 users of e-cigs also smoke regular cigarettes
- Aerosols produced can contain harmful and potentially harmful chemicals including nicotine; ultrafine particles that can be inhaled deep into the lungs; flavoring such as diacetyl, a chemical linked to a serious lung disease; volatile organic compounds such as benzene; and heavy metals
- The amounts of nicotine and other substances in these products can vary widely because they are:
 - Not regulated for content
 - Not subject to manufacturing standards
 - Can be obtained from a wide variety of sources including foreign manufacturers
- Not compliant with a smoke-free workplace



What Helps?

Intervention (source)	Comparator	Odds ratio (95% confidence interval)	Increased chances of quitting successfully
Self-help interventions	No intervention	1.24(1.07-1.45)	24%
Physician advice	Brief advice vs. no advice	1.66(1.42-1.94)	66%
	Intensive advice vs. no advice	1.84(1.60-2.13)	84%
	Intensive vs. minimal	1.37(1.20 to 1.56)	37%
Nursing intervention	Usual care	1.28(1.18 to 1.38)	28%
Individual behavioural counselling	Minimal behavioural intervention	1.39(1.24 to 1.57)	39%
Group behaviour therapy	Self-help programme	1.98(1.60-2.46)	98%
Telephone counselling	Without telephone counselling	1.41(1.27-1.57)	41%
	Less intensive vs. no	1.33(1.21-1.47)	33%
Nicotine replacement therapy (NRT)	Placebo or non-NRT	1.58(1.50-1.66)	58%

Quitting Any Time Helps

Executive Order 13058

August 9, 1997

William J. Clinton

- Bans smoking in all Executive Branch facilities, all interior space owned, rented, or leased by the Executive Branch of the Federal Government
- Bans smoking in front of air intake ducts, in courtyards, and within 25 feet of doorways on GSA-controlled properties

What Does NASA Do?

- NASA strongly supports the continued wellbeing of its employees
- Each Center provides smoking cessation services
 - Outreach to tobacco users, smokers, and smokeless users
 - Access to intervention programs
 - Activities to prevent tobacco use among the workforce, including education on tobacco-related health consequences
 - Center Occupational Health Contracting Officer Representative shall advocate for a work environment conducive to the success of the smoking cessation program and ensure collaboration between disciplines
- NASA complies with GSA's requirement for a smoke-free workplace
 - Facilities Management function typically implements smoke-free workplace policies
- All Federal Employee Health Benefit plans offer 100 percent coverage to help employees quit; plans are required to cover:
 - Individual, group, and telephone counseling
 - All seven FDA-approved cessation medications
 - At least 2 quit attempts per year, with a minimum of 4 counseling sessions of at least 30 minutes each for each attempt

**NASA Supports
Smoking Cessation**

Summary

- Smoking is harmful
- Smoking is costly to individuals and organizations
- Quitting any time improves health
- NASA supports smoking cessation

Sources and Resources

- [Tobacco Free Florida](#)
- [National Cancer Society—Cost of Smoking](#)
- [SmokeFree.gov](#)
- [Get the Facts—U.S. Surgeon General](#)
- [American Lung Association](#)
- [CDC—Smoking and Tobacco](#)
- [CDC Business Guide—Save Money & Save Lives](#)
- [NIH NIDA—DrugAbuse.gov](#)
- [Quitting Smoking Among Adults—United States, 2000–2015 MMWR January 2017](#)
- [Health Risks of Tobacco—American Cancer Society](#)