

Love the Earth!

Earth Day 2020 Event Toolkit

APRIL 22, 2020

Celebrate the Earth,
Live Tobacco Free



California Youth Advocacy Network
info@cyanonline.org
(916) 339-3424 | cyanonline.org

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Students collect cigarette butts during a beach cleanup. Photo by Maile Sur, 2014

The Earth Day Toolkit is designed to assist tobacco prevention advocates in the creation and implementation of successful tobacco-free Earth Day events on college campuses. Few people are aware of the destructive relationship that exists between tobacco production and consumption and the environment. It is the goal of the California Youth Advocacy Network (CYAN) and COUGH (Campuses Organized and United for Good Health) to educate college communities on the devastating impact tobacco has on the environment. Additionally, it is the aim of CYAN's College Program to support grassroots tobacco-free advocacy on college and university campuses.

Included in this Earth Day Toolkit are a number of documents designed to increase your knowledge of tobacco and the environment as well as assist you with planning of campus-based Earth Day events. The packet includes a short but comprehensive overview of tobacco and the environment and a detailed overview of how the environment is negatively impacted by tobacco. In addition to information about tobacco and the environment, we have included Earth Day event ideas, sample media pieces, and sample Earth Day flyers and advertisements.

We hope this information is both useful and motivating to you and those you work with.

The CYAN College Project & COUGH

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Background



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TOBACCO PRODUCTION

Tobacco is grown in over 100 countries throughout the world. China is the world's largest producer followed by Brazil, India, the United States, Malawi, and Indonesia.¹

TOBACCO FARMING

Tobacco is a plant that depletes the soil of naturally occurring nutrients. Before tobacco can be planted the ground must be prepared by carefully plowing the land to kill the ground's old root system, leveling off the fields, burying old crop refuse, breaking up the soil, and incorporating pre-plant pesticides.²

The tobacco plant is susceptible to many diseases and therefore requires an enormous amount of attention and care. This care includes the chemical application of fungicides, insecticides, fumigants, and pesticides.³ It is recommended to farmers that during the first three months of growth, there should be 16 separate applications of pesticides.⁴



PESTICIDES

The U.S. Geological Survey estimates that at least 25.6 million pounds of pesticides are used on tobacco crops each year. The U.S. Environmental Protection Agency (EPA) has a list of over 450 registered and legal pesticide products for use on tobacco. This list includes chemicals that may cause cancer and birth defects as well as pesticides that are potent nerve toxins.⁵

Some of the more common pesticides used on tobacco crops include Aldicarb, Chlorpyrifos, and 1,3-Dichloropropene.

- **Aldicarb:** Aldicarb is considered one of the most toxic pesticides registered in the U.S. The agricultural formulation of Aldicarb contains the toxic contaminant dichloromethane, which causes damage to hearing, vision, kidneys, and the liver. Dichloromethane is both a carcinogen and a mutagen and is also toxic to birds, fish, honeybees, and earthworms.
- **Chlorpyrifos:** Chlorpyrifos is considered a broad-spectrum organophosphate insecticide. Chlorpyrifos is known to contaminate air, groundwater, rivers, lakes, rainwater, and fog. Residues from Chlorpyrifos can be found up to 15 miles from the site of application.
- **1,3-Dichloropropene (1,3-D):** 1,3-Dichloropropene, also known as Telone, is a highly toxic soil fumigant. The chemical seeps through soil easily and has been found in U.S. groundwater, drinking water, and rainwater. Studies have found 1,3-D to cause cancer in laboratory animals and genetic damage in insects and mammal cells.⁶





In addition to the direct dangers associated with chemical use on soil, ground water, waterways, etc., the storing and disposal of pesticide and fertilizer containers poses additional threats to the environment. While farmers know that used bottles and packets of pesticides should not be burned, buried, or disposed of in community environments, they have few options for proper disposal. With no local hazardous waste collection centers or recycling centers in developing countries where tobacco is grown, the toxic pesticide containers end up in fields, rivers, and woods.⁷ A study in Southern Brazil found that nearly 80% of tobacco growing families disposed of their waste inadequately by throwing the used pesticide containers in the woods or burning them.⁸

METHYL BROMIDE USE

A handful of crops – tomatoes, strawberries, peppers, nursery crops, and tobacco – are grown with methyl bromide, an odorless, toxic gas. The gas is used to fumigate and sterilize the soil by exterminating all living organisms. In 1997, over one million pounds of methyl bromide were applied to U.S. tobacco fields while over 5.5 million pounds were applied worldwide. The U.S. EPA classifies methyl bromide among the most lethal of extremely toxic pesticides. The ozone layer is also greatly affected by methyl bromide.⁹



The U.S. EPA classifies methyl bromide among the most lethal of extremely toxic pesticides.



25.6 million pounds of pesticides are used on tobacco crops each year.

DEFORESTATION

The clearing of land to be used for tobacco farming as well as the curing of tobacco contributes greatly to the destruction of forests throughout the world. Curing of tobacco leaves is done through one of three methods - flue, fire, and air. The air curing process is the only one of the three processes that does not use wood for burning.¹⁰

The flue method is the most prevalent tobacco curing process. In this process, if wood rather than coal is used to create the heat for curing, devastation to the land and severe deforestation can result. In countries throughout Africa, wood is seen as a “free good” and is relatively easy to obtain.¹¹ Roughly 5% of deforestation in all of Africa is caused by tobacco production. In Malawi alone, tobacco production is responsible for 26% of deforestation within the country. In the Namweran highlands region of Malawi, nearly 80% of all harvested wood is used for tobacco processing, even though only 3% of farmers in the area work on that crop.¹²

The implications to ancient forests and scarce natural resources demolished for tobacco production are devastating. Once the forests are cleared and the resources depleted, the domino effect of ecological destruction occurs. Tree removal leads to soil erosion that leads to flooding. With flooding comes loss of soil nutrients and natural habitats. With drastic loss of trees comes an increase in harmful gases that leads to global warming. All of this decreases the biological diversity and ecological sustainability of all living creatures in the land.¹³



REFORESTATION PROGRAMS

Tobacco production is heavily dependent upon the wood and natural resources of countries throughout the world. As a result, tobacco companies have begun investing in reforestation programs with the intent to refurbish area woodlands and natural resources. Unfortunately, the programs set up by tobacco companies around the world create greater problems for the environment. Typically, the eucalyptus tree is planted to replace the indigenous trees that have been removed. The eucalyptus tree is often an inappropriate choice for arid, water-scarce environments. Its root system removes water from neighboring crops and vegetation and takes up to 10 years to mature. In addition to being a wholly non-indigenous species to most areas that grow tobacco, the eucalyptus tree's planting season coincides with tobacco and food planting season, making it very difficult for any farmer to put reforestation before food or possible income.¹⁴



TOBACCO MANUFACTURING

The manufacturing of tobacco results in a sizable amount of liquid, solid, and airborne waste. Liquid waste includes tobacco slurries, solvents, oils, and greases. Solid waste is inclusive of paper, wood, plastic, unusable tobacco, packaging materials, and contaminated dirt. In 1992, the EPA reported that 27 million kilograms (kg) or approximately 59.4 million pounds of chemical waste was generated from tobacco manufacturing, with 2.2 million kg (4.85 million pounds) of this hazardous waste released into the environment.¹⁵

While tobacco production has historically created an environmental crisis throughout the world, new products create even more challenges. In 1999, a report disclosed findings regarding the production of what the tobacco industry call “healthier” cigarettes. Ironically, as these “low-nicotine” products are produced, the amount of nicotine waste and impact on communities and the environment is increased.¹⁶



In the flue method, a common tobacco curing process, if wood rather than coal is used to create the heat for curing, severe deforestation

CIGARETTE LITTER

Annually, an estimated 5.6 trillion filter-tipped cigarettes are smoked and disposed of throughout the world, leading to 135 million pounds of discarded cigarette butts.¹⁷ In addition to littered butts, other products such as cigarette cartons, packs, cellophane wrappers, and chew containers are common forms of trash.

In 1997, 90 countries around the world participated in local cleanup efforts at 5,000 sites. Of the 6,185,081 items picked up, 19.1% of the products were cigarette butts. Cigarette litter was the leading item among the top 20 items collected.¹⁸ In California, cigarette butts make up 34% of total litter collected, and California public agencies make spend an excess of \$41 million annually on litter cleanup.¹⁹

Aside from the unsightliness, cigarette litter has a major impact on the community environment. Filters have been found in stomachs of fish, birds, whales,

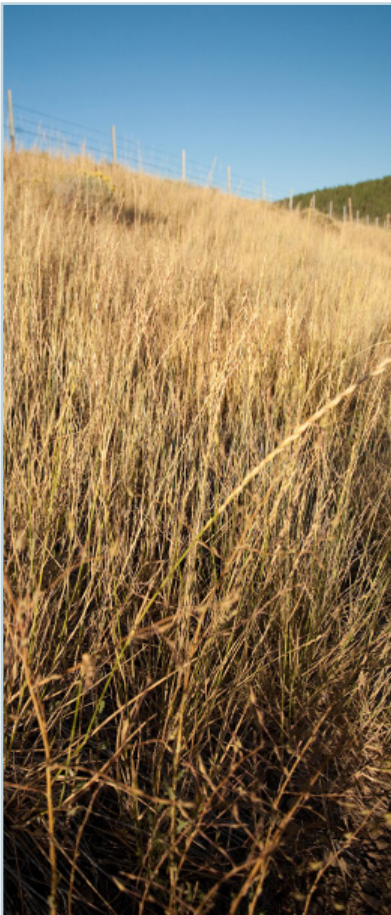


Filters have been found in stomachs of fish, birds, whales, marine animals, land animals, and even young children.



marine animals, land animals, and even young children. Ingestion of these littered butts can cause serious health problems in humans and animals.²⁰ Furthermore, littered cigarette butts release toxic chemicals such as nicotine and arsenic into the environment.²¹ Chemicals from cigarette filters bleed into soils, waterways, and runoffs from urban environments. Recent research suggests that littered cigarette butts are point sources for prolonged metal contamination in the environment, which increases the potential for harm to local organisms.²²

Cigarette butts are considered non-biodegradable waste.²³ These tiny pieces of trash are made of cellulose acetate which is photodegradable, but not biodegradable. The filters trap the toxins from the tobacco such as arsenic. When littered into the environment, all the toxic chemicals are released.²⁴



FIRE DANGER

Globally, cigarettes are responsible for an estimated one million fires per year at a cost of US\$27.2 billion a year. In the United States alone, approximately 100,000 fires are caused from cigarettes each year adding up to \$6.95 billion in expenses. In 1986, the world saw the worst forest fire in China's history when a cigarette ignited a blaze that destroyed 1.3 million hectares of land, the equivalent of more than 3 million acres or 3 times the size of Rhode Island.²⁵

TOXIC AIR CONTAMINANT

Secondhand smoke, also known as environmental tobacco smoke (ETS), has been formally identified as an airborne toxic substance by the California Environmental Protection Agency. Secondhand smoke is a complex mixture of compounds produced by burning of tobacco products. Secondhand smoke is also a source of other toxic air contaminants such as benzene, 1,3 butadiene, and arsenic. Each year in California, tobacco smoke is responsible for the release of 40 tons of nicotine, 365 tons of respirable particulate matter, and 1900 tons of carbon monoxide.²⁶

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Event Ideas



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CAMPUS ADMINISTRATION AND STUDENT GOVERNMENT

- Ask campus administration to post a tobacco-free message on the homepage of the campus website during the week of Earth Day. The posting should include information about tobacco and the environment, information about your event (i.e., event time, location, and contact information), and language from your campus tobacco-free policy.
- Educate your campus leaders and decision makers on tobacco's destructive relationship with the environment, specifically with your campus. Use your educational visit with decision makers to discuss a new or revised smoke-free or tobacco-free policy for your campus.
- Prior to Earth Day, take pictures of the butt litter on campus and where the butts are disposed. Circle Butts in red to highlight them in the photo. Post photos on social media, send in eNewsletters, and share them with campus administration.
- If the campus is not enforcing the smoke-free/tobacco-free policy, use the pictures to demonstrate the need for increased enforcement.
- Create a petition for a campus-wide tobacco-free policy and have student volunteers collect signatures.



CLUBS AND ORGANIZATIONS

- Involve student groups in cigarette butt litter cleanups.
- Provide information on campus tobacco prevention efforts, the smoke-free/tobacco-free policy, and on campus cessation services that are available to students for support of their quit efforts to all campus clubs and organizations.
- Ask the Student Life Director to send out information about your event as well as information on tobacco and the environment to all student organizations.
- Educate the campus environmental club on tobacco and the environment (e.g., CalPIRG, Sierra Club, etc.). Ask the club to sign a resolution of support for your campus efforts.
- Utilize your Earth Day event to educate campus clubs and organizations on tobacco industry sponsorship of student groups. If your campus has a tobacco sponsorship policy, educate campus groups about the policy while you are educating them about tobacco and the environment. If there is no policy, educate the groups on the importance of adopting a sponsorship policy.

GENERAL CAMPUS ACTIVITIES

- Do a cigarette butt cleanup and display collected butts at table. (Hint: Do the cleanup the day and/or week before the event so you can display the butts you gather at your event.)
- Place sprinkler flags in grassy/dirt areas where tobacco butts are littered. Use brightly colored flags such as orange or yellow. The large quantity of flags placed around campus will draw attention to the butt litter problem on campus.
- Leave notes in classrooms promoting your event, or with general facts about tobacco and the environment. You can use fliers or write on black/white boards.
- Email faculty requesting they make announcements about the day's events in their classes.
- Send out a campus wide e-mail about your event.
- Place table tents with tobacco and the environment facts on tables in campus restaurants.
- Place table tents in staff and faculty lounges.
- Hold an art ad contest for the campus community. Ask participants to create a creative advertisement on tobacco and the environment. Provide participants with information about the campus tobacco-free policy or cessation services to provide in the advertisement. Invite a member of the Student Health Center, the Faculty Senate, an Associated Student member, a person from the student newspaper, and a member of your coalition to judge the competition. The top one to three winners can be rewarded with gift certificates and/or promotional items. Ask the representative from the newspaper to feature the winning design in the paper.
- Host a screening of Thangata (a documentary on tobacco farming in Malawi) on campus. Prior to the screening, educate the audience on how tobacco hurts the environment and how the campus community can celebrate Earth Day by living tobacco-free (and supporting tobacco-free campus policies!).
- Purchase a button maker and make buttons to hand out at your event.

MEDIA

- Send a Letter to the Editor with information about how tobacco is harmful for the environment. Include in the letter information on the campus tobacco-free policy, policy enforcement, and available cessation services for the campus community.
- Ask the campus paper to do a story on how student, faculty, and staff can celebrate Earth Day by living tobacco-free. Include information the general public does not know about tobacco such as tobacco's link to deforestation and global warming. You can also include information in the article such as other reasons to quit using tobacco, how many students on campus use tobacco, how many people want to quit. Encourage the paper to promote on campus cessation services and available resources for those looking to quit tobacco use.
- If your campus paper has a section on the week's events, make sure and include your event and/or a general posting on tobacco and the environment in the papers coming event section.
- Promote your Earth Day event on the student radio or on the campus television station.
- Consider screening a video segment or ad from TobaccoFreeCA.com on electronic information screens around your campus.

- At sporting events held during the week of Earth Day, have the sports announcer make announcements about your event and ways to live tobacco-free (include available cessation services on campus in announcement).

RESIDENTIAL HOUSING

- Provide information to Residential Advisors to have a tobacco-free party on the day and/or night of April 22nd. Provide RA's with food for the party as well as incentive items for those celebrating Earth Day by living tobacco-free.
- Provide all residential halls with fliers on tobacco's relationship with the environment.
- Place table tents in the Dining Halls to promote Earth Day events and/or feature facts about tobacco and the environment.

STUDENT HEALTH CENTER

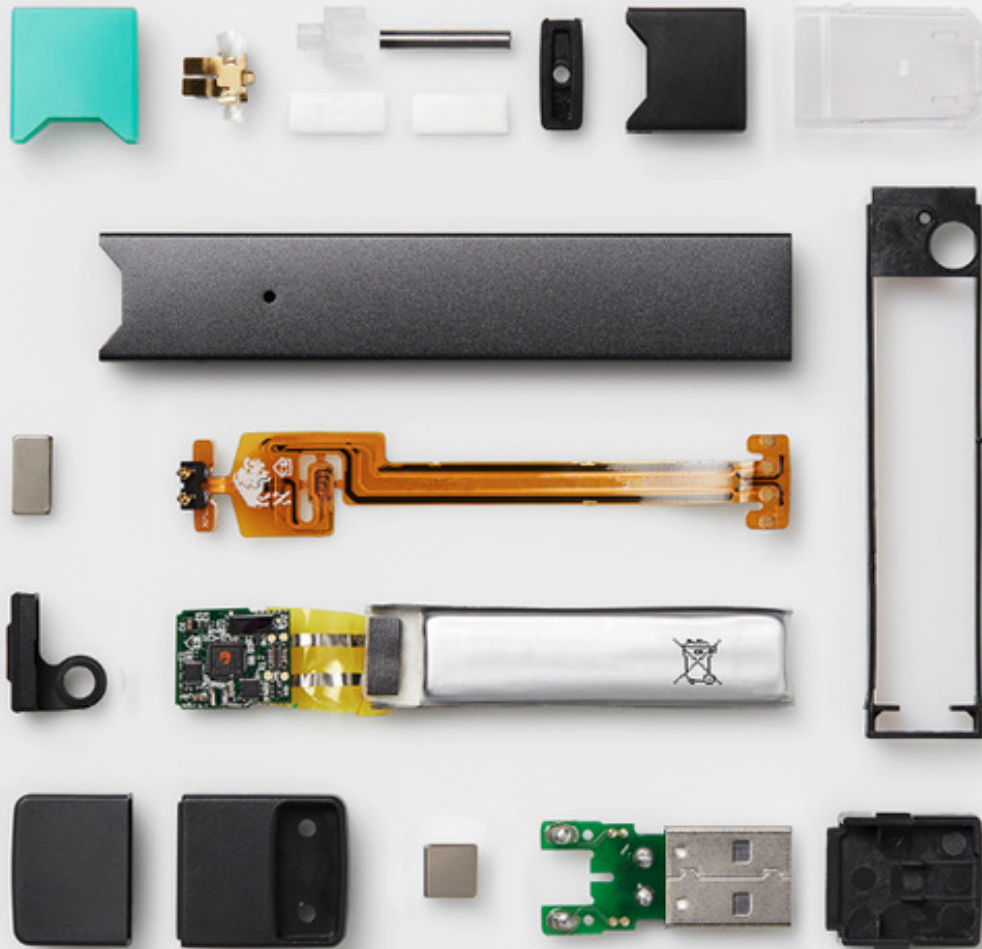
- Post fliers in the Student Health Center.
- Provide materials/information on tobacco and the environment to the Student Health Center to distribute to patients who use tobacco.
- Get Peer Health Educators involved in Earth Day activities.

TABLING

- Distribute information about the different ways in which tobacco harms the environment.
- Have quit kits or cessation materials available for those interested in quitting tobacco. Or give out promotional items and/or materials to those interested in learning more about tobacco and the environment.
- Promote campus and/or community cessation services and the smoke-free/tobacco-free campus policy.
- Have available petitions for support of current campus policy initiatives.
- Play popular songs, incorporate bright colors and catchy posters, and offer free goodies to those who visit your table such as free pizza .
- Have a tobacco fact quiz with information on tobacco and deforestation, tobacco farming, etc.



Materials



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Created in collaboration with the California Tobacco Control Program.
For more information and additional resources please visit:
Tobaccofreeca.com

California Department of Public Health
TOBACCO CONTROL PROGRAM

Environmental Impact of Tobacco
Spokesperson Talking Points

TOXICITY

- Cigarette butts are toxic.
- Cigarette butts release the same toxic chemicals found in cigarettes, such as arsenic and nicotine, into the environment.
- Cigarette butts are a threat to our aquatic ecosystems.
- Cigarette butts are poisonous when ingested by children or wildlife.

MAGNITUDE

- Every year, 5.6 trillion cigarettes are consumed worldwide.
- More than 360 billion cigarettes are consumed in the United States annually, leading to 135 million pounds of discarded butts.
- The Ocean Conservancy reported that cigarettes/cigarette filters represent 28 percent of total debris items collected worldwide, making it by far the most prevalent item found.

IMPACT

- Discarded cigarette butts are non-biodegradable waste.
- Cigarette filters are made from cellulose acetate, a plastic which is technically biodegradable. In practice, cellulose acetate is resistant to biodegradation and can persist in the environment, even under ideal conditions for biodegradability.
- Cigarette butts are the number one litter item found on beaches and roadsides, and a major litter item at parks.
- Cigarette butts make up 34 percent of the total litter collected in California.
- Cigarette waste is a significant contributor to storm drain trash.
- Discarded cigarette butts have been linked to wildfires, which result in the destruction of wildlife, vegetation and structures.
- California public agencies spend in excess of \$41 million annually on litter clean up.



CIGARETTE BUTTS ARE TOXIC TO THE ENVIRONMENT



Cigarette butts are poisonous to children, pets and wildlife.

They are the **#1** item found on beaches and roadsides, and a major litter item at parks.

Lead
once used in paint

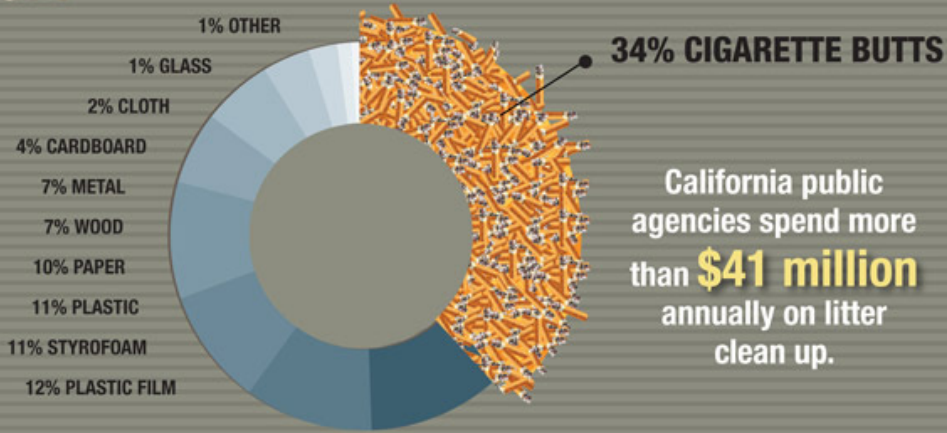
Arsenic
once used in rat poison

Nicotine
formerly used as insecticide

Cigarette butts are **NOT** biodegradable

Cigarette butts **leach toxic chemicals** into the environment including lead, arsenic and nicotine – the same toxic chemicals found in secondhand smoke.

Total Litter Collected in California



California public agencies spend more than **\$41 million** annually on litter clean up.

Proper handling and disposal of E-cigarettes and other vaping devices

Step 1

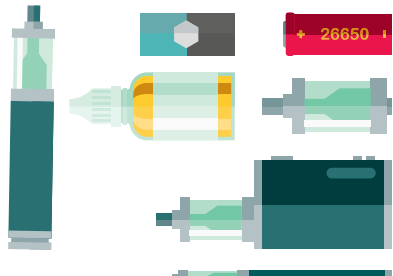
Always wear new nitrile gloves when handling e-cigarettes and vaping devices



Step 2

Place all confiscated parts into a sealed container or bag for storage.

- This includes:
- Devices and batteries
 - E-liquids and bottles
 - Tanks, cartridges, and pods



Step 3

Transport to a hazardous waste disposal site. To find the nearest location, visit:

<https://www.calrecycle.ca.gov/HomeHazWaste/Directory/>



Don't

Handle e-cigarettes with bare hands

Rinse or throw e-liquids in the sink or toilet

Throw any component in the trash or recycling bin



Outreach Quiz

EARTH DAY TOBACCO QUIZ!

*** = CORRECT ANSWER**

1. How many trees in the world are cut down for the purpose of manufacturing tobacco?
 - a. 1 in 50 trees
 - b. 1 in 25 trees
 - c. 1 in 10 trees
 - d. 1 in 8 trees *
2. How many cigarettes can be produced by one tree?
 - a. 2000
 - b. 1000
 - c. 800
 - d. 300 *
3. Cigarette butts make up what percentage of total waste collected in CA?
 - a. 15%
 - b. 26%
 - c. 34% *
 - d. 52%
4. Globally, what is the single most littered item collected in beach, river, and city cleanups?
 - a. Paper cups
 - b. Plastic bottles
 - c. Cigarette butts *
 - d. Chewing gum
5. How long does it take for cigarette butts to decompose?
 - a. 1 year
 - b. 5 years
 - c. 10 years
 - d. Cigarette butts never decompose *
6. How many pounds of discarded cigarette butts are generated in the world each year?
 - a. 10 thousand pounds
 - b. 145 thousand pounds
 - c. 100 million pounds
 - d. 135 million pounds *

Sign Up To Help

NAME	PHONE OR EMAIL	COMMENTS

TOBACCO FREE CATALOG

The tobacco Education Clearinghouse of California, or TECC offers a collection of tobacco related educational materials available to order for use in the field. www.tobaccofreecatalog.org

TOBACCO FREE CA

Tobacco Free CA is a website from the California Department of Public Health which offers information on tobacco, including effects on the environment. “Thrown Away” is an ad about butt litter, which may be shared with college campuses throughout the state. www.tobaccofreeca.com

TOXIC BUTTS

Toxic Butts is a partnership between public health and environmentalists working to raise awareness about the toxicity of cigarette butt litter in our environment.

www.toxicbutts.com

#NOMASBUTTS

NOMASBUTTS is an environmental awareness campaign from the California Department of Public Health. The campaign focuses on cigarette butts and their destructive impact on the environment.

www.nomasbutts.org



California Youth Advocacy Network
info@cyanonline.org
(916) 339-3424
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