

Earth Day

2024 Event Toolkit



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

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***Engaging campus communities to
reduce the environmental impact
of commercial tobacco***

INTRODUCTION

Since 1970, Earth Day has become a day of action towards environmental consciousness that has led to the creation of the Environmental Protection Agency (EPA) and several environmental laws. Fast forward to today, Earth Day has become not only a worldwide observance, but a critical day to continue fighting for a clean environment as we have seen the effects of climate change. It's time to keep the planet in mind, and leave disposables behind.

The Earth Day Toolkit is designed to assist tobacco prevention advocates like you in creating and implementing successful smoke and tobacco-free Earth Day events on college and university campuses. As climate change becomes more prominent in the world, few people are aware of the destructive relationship that exists between vaping, commercial 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 commercial tobacco has on the environment. Additionally, it is the aim of CYAN's College Program to support grassroots smoke and tobacco-free advocacy on college and university campuses.



It's important to note that the focus of this Toolkit is to support events and efforts that advocate for the elimination of commercial tobacco, not traditional tobacco. Tobacco has been used for sacred, ceremonial, or medicinal uses among Indigenous American communities long before the introduction of commercial tobacco. In many tribal nations in the US, the term commercial tobacco has been adopted to describe commercially made tobacco products.

Included in this Earth Day Toolkit are several 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.



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BACKGROUND:

FROM PRODUCTION TO DESTRUCTION





TOBACCO PRODUCTION

- Tobacco is grown in over 125 countries throughout the world.
- China is the world's largest producer followed by India, Brazil, Indonesia, the United States, and Zimbabwe.¹

TOBACCO FARMING

- 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 requires an enormous amount of attention and care since it is susceptible to many diseases. 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



- **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** 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)**, 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

DID YOU KNOW?

- 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



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.⁷



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

STORAGE & DISPOSAL

- Used bottles and packets of pesticides should not be burned, buried, or disposed of in community environments.
- Farmers 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.⁸
- 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.⁹

TOBACCO PRODUCTS 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.¹⁰
- 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.¹¹

MINING FOR VAPE BATTERY METALS

- The power source in the bulk of vaping devices demands the extraction of metals such as lithium and cobalt, resulting in the depletion of these finite natural resources from the earth.¹²
- The battery in the majority of vaping devices, like those found in electric cars and smartphones, requires cobalt, a metal primarily sourced from the Democratic Republic of the Congo, which provides 70% of the world’s supply. Cobalt is essential for making lithium-ion batteries, powering various devices. However, cobalt mining in the Congo often involves dangerous conditions, exposing workers to toxic heavy metals.¹³
- The process of mining lithium is a water-intensive process that depletes valuable freshwater sources. In California, multiple lithium mining projects source water from the Colorado River, sucking billions of fresh water annually.¹⁴





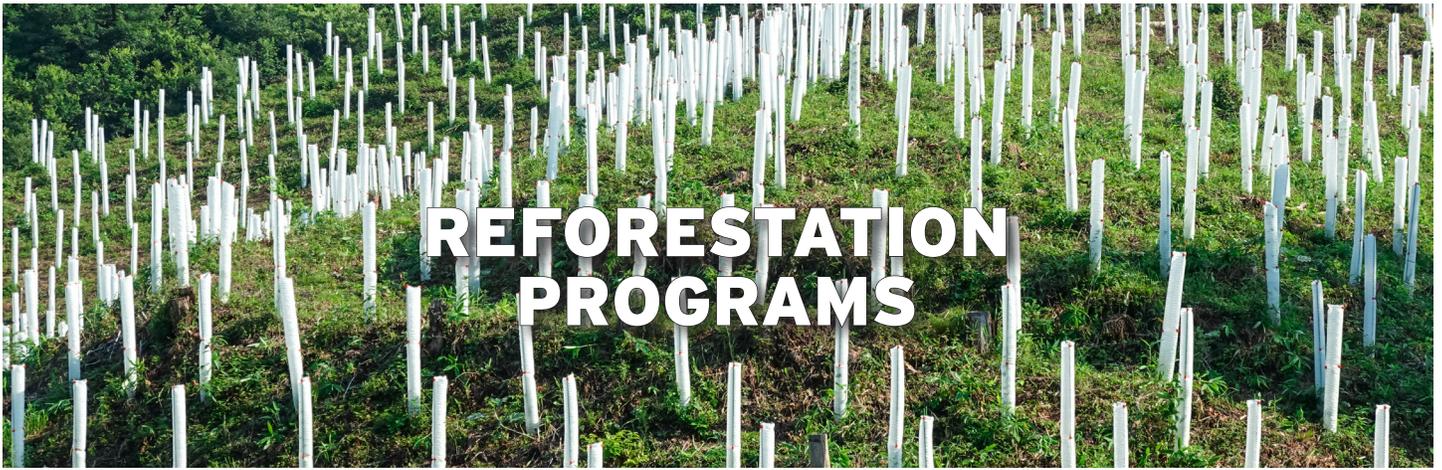
- The clearing of land to be used for tobacco farming as well as the curing of tobacco contributes greatly to the destruction of forests throughout the world. Approximately 600 million trees are cut down each year to facilitate activities such as planting, harvesting, and curing in the tobacco industry.¹⁵
- 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.¹⁷
- 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.
- Once the forests are cleared and the resources depleted, the domino effect of ecological destruction occurs.

DID YOU KNOW?

- In countries throughout Africa, wood is seen as a “free good” and is relatively easy to obtain.¹⁶ 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.¹⁸



All of this decreases the biological diversity and ecological sustainability of all living creatures in the land.¹⁹

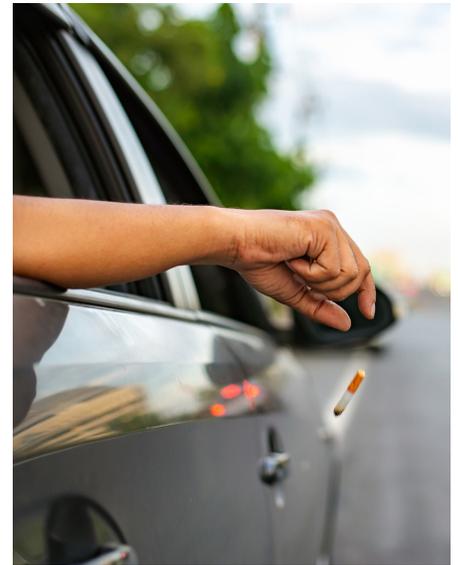


- Tobacco production is heavily dependent upon wood and natural resources of countries throughout the world.
- Tobacco companies invest in reforestation programs with the intent to refurbish area woodlands and natural resources. However, these programs create greater problems for the environment.
- The root system of the eucalyptus tree, which is typically planted to replace the indigenous trees that have been removed, removes water from neighboring crops and vegetation. This is an inappropriate option for arid, water-scarce environments as it 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.²⁰

HOW TOBACCO PRODUCTS IMPACT THE EARTH

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.²¹
- In August of 2020, over 300 acres of land burned in Solano County, California, as a result of a discarded cigarette butt.²²
- The lithium-ion batteries in vapes have been known to explode and cause fires in garbage trucks and waste management plants if damaged or exposed to extreme heat. A California survey found that 56% of fires at waste facilities between 2016 and 2018 were reported to have been caused by batteries, most of which were lithium-ion ones.²³



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. It is also a source of other toxic air contaminants such as benzene, 1,3 butadiene, and arsenic.
- Secondhand aerosol, produced from vapes, contaminates the surrounding air with nicotine, metals, ultrafine particles, and toxins that are known to cause cancer.²⁴

CIGARETTE LITTER

- Tobacco products are the most commonly littered item, worldwide. Annually, an estimated 4.5 trillion cigarette butts pollute our planet.²⁵
- Other products such as cigarette cartons, packs, cellophane wrappers, and chew containers are common forms of trash.
- In California, cigarette butts make up approximately one-third of all litter collected. In 2021, California invested \$1.1 billion in state and local litter cleanup.²⁶
- Ingestion of littered butts can cause serious health problems in humans and animals.²⁷
- Littered cigarette butts release toxic chemicals such as nicotine and arsenic into the environment.²⁸
- 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.²⁹
- Cigarette butts are considered non-biodegradable waste.³⁰ 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.³¹



VAPING AND THE ENVIRONMENT

- The U.S. throws out an estimated 4.5 disposable vapes per second, generating three different kinds of waste: plastic waste, hazardous waste, and electronic waste.³²
- The e-liquid left in cartridges and refills contain nicotine salts and heavy metals, which can leach into soil and waterways or can be ingested by wildlife when improperly disposed of.
- E-cigarette waste cannot biodegrade even under severe conditions. Discarded e-cigarette cartridges break down into microplastics and chemicals that flow into storm drains, polluting waterways and wildlife.³³



VAPE DISPOSAL

- Vape waste from single-use plastics (e.g., the vaping device itself, pods, cartridges, e-liquid containers, and product packaging) are hazardous for the environment because it creates plastic waste, toxic bio-hazard waste, and electronic waste, all of which needs to be disposed of separately.³⁴
- Vape manufacturers provide minimal to no guidance to consumers on how to dispose of used devices or pod-cartridge products. Companies such as Puff Bar marketed “disposable” vape products but don’t provide clear instruction on how to properly dispose of these single-use devices.³⁵
- There is no industry guideline for recycling e-cigarettes in the U.S. and no requirement in place to hold manufacturers accountable for the post-consumer waste they helped produce.
- The majority of vapes are improperly disposed of. Two-thirds of vape users report throwing their devices in the trash, which poses serious fire risks to waste collection bins, vehicles, and facilities. Another 9% of vape users report littering their devices on the ground.³⁶

EARTH DAY EVENTS



TABLING FOR EARTH DAY

Tabling, or hosting a table with free giveaways is a great way to engage and educate students on campus. Oftentimes colleges and universities will allow tabling in high traffic areas on campus such as the student union, library, student housing, gym, food courts, and near larger lecture halls. Below are some tips on hosting a table for Earth Day.



5 QUICK TIPS FOR TABLING

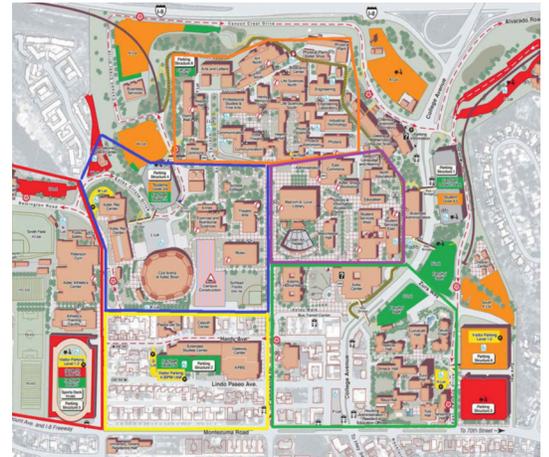
1. **SIGNAGE** - Create a large sign that can be visible to the campus community before they walk up to your table.
2. **INTERACTIVE** - Games, trivia questions, prizes, surveys, and other interactive activities can make a visit to your table worthwhile. Use the facts and information in this Toolkit for trivia games. You can also collect tobacco waste prior to the event and place all counted waste in a bin for student to guess the quantity.
3. **ENGAGE** - Remember to be physically and mentally present - don't get distracted with your phone or personal conversations. If you look busy, people might be hesitant to talk to you.
4. **EMPATHY** - Be empathetic to individuals who use tobacco, most already know the behavior is unhealthy to them and others around them.
5. **QUIT KITS** - Considering having a "build your own quit kit" station at your table.

TOBACCO PRODUCT WASTE CLEANUPS

Tobacco product waste cleanups are a great way to engage young people in policy advocacy on campus. You can also use these data to evaluate the effectiveness of your smoke or tobacco-free policy on campus. Use the same procedure each time you conduct this event so that you can compare your results to previous years.

MATERIALS NEEDED

- Large mason jar or other smell-proof container in which to keep the butts and discarded vape waste
- Plastic/latex gloves and hand sanitizer
- Clipboard with paper and pen for each zone
- Permanent markers
- Gallon-size ziploc bags
- Campus maps marked with zones (if you have a large group of volunteers) or focus areas (if you have a small group)
- Camera



TIPS AND THINGS TO REMEMBER

- Working with campus facilities/maintenance is important to getting an accurate picture of how many people are continuing to smoke on campus.
- Cigarette butts and vape waste are toxic and smelly. You will not want to recount the tobacco product waste. Having one student in charge of keeping a tally while another one picks up the waste will help with keeping an accurate count.
- In addition to picking up butts and vape waste, pick up other tobacco-related waste (tips from little cigars, cigarillo wrappers, packaging, etc.).
- Use the time to educate your volunteers about your work and what you're hoping to achieve (e.g., a tobacco-free campus). Volunteers can also collect petition signatures, letters of support, or pictures and stories of how tobacco use on campus affect them and their friends.



PROCEDURE

1. Determine the day and time the cleanup will be conducted. Many clean ups last one hour, but can be shortened if needed.
2. At least two weeks prior to the event, contact campus facilities and request that they not pick up tobacco waste for one week prior to your event.
3. Determine what will be done with the collected waste. Consider displaying the collected tobacco waste in a clear container to bring attention to the issue, educate the community on tobacco and the environment, and to promote your program and the campus policy. Remember, tobacco waste is toxic waste and extremely smelly. Whatever container you use, be sure it can contain the odor of the butts and vape waste.
4. Divide the campus into sections and assign students to different zones to efficiently clean the area. Cleaning the entire campus may not be feasible; choosing focus areas may be necessary for smaller groups.
5. Send students out in pairs or small groups with one student taking a tally of each butt while another picks the butts up.
6. Ask students to also keep a record of the number of individuals that they observe smoking or vaping during the event.
7. Give each pair of students gloves, a ziploc bag, and a permanent marker. Have them write the total number of butts and vaping devices collected, people smoking, and people vaping, on the bag with the marker. It's important to separate products and properly dispose of waste. Cigarette butts, empty pods, and wrappers can be collected in one bag whereas single use vaping devices and vape pen batteries can be stored in a different bag or container. A third bag may be needed if filled pods or cartridges are collected.
8. Assign one or two students to be the photographer. Post pictures and results to social media channels.



PROPER HANDLING AND DISPOSAL OF WASTE

- Vape waste is toxic to the environment. Vape waste is inclusive of devices and batteries, e-liquids and bottles, tanks, cartridges, and pods.
- When handling vape waste or any tobacco product waste, always wear new nitrile gloves. Liquid nicotine and THC solutions can be absorbed through the skin and can cause accidental poisoning.
- The nicotine solution in vaping products is considered to be hazardous waste. Do not rinse e-cigarette items, including used pods and cartridges, as nicotine and THC in the components will contaminate the water.
- Single use vaping devices, vape pens, mods, and tanks all have batteries which should be recycled. Battery waste should be stored in a plastic sealable container and kept away from heat and sunlight.
- Prior to collecting vape waste, check with your local hazardous waste disposal site to learn if cartridges, pods, and battery waste can all be stored and disposed of together or if waste needs to be separated by type. To find the nearest location, visit: <https://dtsc.ca.gov/household-hazardous-waste/>



OTHER EVENT IDEAS

Other events that can be done during Earth Day or year-round!

1. Impact Awareness Campaign

Host an interactive session or set up booths around campus to educate students about the environmental impact of disposable vapes and tobacco products. Use visuals, infographics, and statistics to highlight the harmful effects of littering and improper disposal of these items on the environment.

2. Social Media Campaign

Encourage students to document their journey of turning in disposable vapes and other tobacco-related waste at the hazardous waste collection site through photos, videos, and stories on social media platforms. Create a dedicated hashtag for the campaign and prompt students to share their posts with the hashtag to amplify the message and reach a wider audience.

3. Information Sessions or Workshops

Organize informational sessions or workshops specifically tailored for college administrators, district representatives, and other relevant stakeholders. These sessions should highlight the harmful chemicals present in vape waste, their environmental impacts, and the classification of vape waste as hazardous waste according to relevant regulations.



ENGAGING

WITH OTHER CAMPUS ORGANIZATIONS



Collaboration is key to really promote smoke/tobacco-free education, policy, and cessation on college and university campuses. Here are some strategies for connecting with your campus administration and student clubs or organizations.

CAMPUS ADMINISTRATION AND STUDENT GOVERNMENT

- Collaborate with your administration and/or campus' strategic communications office to create Earth Day email and social media communication that can be posted to the campus community.
- Collaborate with Student Government to promote compliance with an existing smoke/tobacco-free policy or gain support for a new policy.



STUDENT HEALTH CENTERS

- Reach out to the student health center to learn if they ask patients about their tobacco at intake. If they do, encourage the student health center staff provide them with cessation information, Kick It California (formerly CA Smokers' Helpline) and quit kits.
- Ask your student health center if they are willing to post Earth Day messages on their website and social media pages on and around April 22. Earth Day-specific messages are provided later in this toolkit and an assortment of social media tobacco quit messages are available at www.cyanonline.org/tools1/#digitalmedia.



CLUBS AND ORGANIZATIONS

- Create a competition between clubs or residence halls to see who can collect the most e-cigarette and other tobacco waste for proper recycling or disposal.

WASTE MANAGEMENT AND SUSTAINABILITY

- Develop a relationship with the Waste Management department or campus sustainability programs. Educate staff and leadership on the dangers of vape waste and proper disposal.
- Work with Waste Management and Sustainability to promote safe collection and disposal of vaping devices used by students, faculty, and staff.



TOBACCO TREATMENT IDEAS

ENCOURAGING QUIT ATTEMPTS

- Utilize social media to post messages on the devastating effects of vape and tobacco use on the environment and encourage students, faculty, and staff to quit to protect their health and the environment. Social media posts should also include a link to further resources to support quit attempts, such as cyanonline.org/quit-tobacco or the campus health center.
- Digital Earth Day pledges are a tool to engage students in participating in Earth Day events. Instagram allows for easy sharing and tagging so people can share why they choose to live-tobacco free.
- Challenge students to start their quit journey on Earth Day and pledge to protect their health, the community, and the environment.



CYAN provides free materials to colleges and universities to assemble quit kits.

SUPPORTING QUIT ATTEMPTS

- Make quit kits and/or Earth Day tote bags available for students to pick up on campus. You may partner with the health center or campus pharmacy if open. Shipping may also be an option to consider if resources are available.
- Partner with departments operating on campus (e.g., residential halls, athletics, departments with lab classes) or local community organizations, such as food distribution centers or restaurants, to distribute educational resources, tote bags, and/or quit kits.
- If buildings on campus offer free hand sanitizer or masks, consider making educational materials or tote bags available along with more information or resources to support quitting.
- Ask the student health center staff to host office hours or drop-by meetings on Earth Day to provide support or answer questions for students interested in quitting vaping or tobacco.
- Advertise campus resources that are available (e.g., health center). Additional resources to support young people in quitting are available on cyanonline.org/quit-tobacco, which include information on KickIt California, free apps and texting programs, and a digital quit kit.

EARTH DAY RESOURCES



EARTH DAY 2024

TIPS FOR POSTING SOCIAL MEDIA

#HASHTAGS!

Be sure to always include the same hashtag when posting about your campus' Earth Day event(s). Using #EarthDay2023 #ED24 #ProtectOurPlanet #QuitTobacco #TobaccoFreePlanet #QuitVaping #TobaccoFreeCampus is a great way to reach students, but you can get creative too! Feel free to incorporate campus-specific hashtags to make the posts feel more branded to your campus and student body.

POST ACROSS PLATFORMS!

You want to cast a wide net with your Earth Day 2024 social media, so don't limit yourself to one social media platform. Post content across platforms and unite them with your hashtags. You can share these posts on Instagram, Facebook, Twitter, Snapchat, and TikTok to increase reach.

LINK TO A QUIT RESOURCE!

Always be sure to include a quit resource with your post. This can be a campus website, health center, or CYAN's quit tobacco page and digital quit kit, which are available in both English and Spanish. It's also helpful to link this website in your bio so young people can just click on the link instead of copy/paste. We suggest adding (link in bio) in the text of your post(s) so young people know they can click the link in your profile.

READY. SET. POST!

Below are instructions for posting Earth Day 2024 social media:

Step One: Select an Earth Day 2024 social media post.

Step Two: Add text to the post or a fact about commercial tobacco and the environment.

Step Three: Add the #hashtags

Step Four: Link to a quit resource or campus event.

Step Five: Post!



ADDITIONAL RESOURCES

TOBACCO FREE CATALOG

The Tobacco Education Clearinghouse of California,(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

CALIFORNIA YOUTH ADVOCACY NETWORK

The California Youth Advocacy Network (CYAN) provides resources for education, including an informational video on the impact of nicotine vape waste and single-use plastic e-cigarette products on the environment, as well as social media posts that are available for download. CYAN also provides information on free resources for youth and young adults to support them in quitting.

www.cyanonline.org



CYAN'S QUIT TOBACCO PAGE FOR YOUTH AND YOUNG ADULTS

www.cyanonline.org/quit-tobacco

This webpage includes quit tips and youth/young adult-friendly tobacco cessation resources including links to apps, website, and a downloadable digital quit kit. The site is available in English and Spanish.



**California
Youth
Advocacy
Network**

KICK IT CALIFORNIA

www.kickitca.org

Kick It California, formerly the California Smokers' Helpline, offers free counseling and resources to individuals interested in quitting tobacco. The website includes information on quitting smoking, vaping, and all tobacco products. Resources are available in English, Spanish, Chinese, Korean, and Vietnamese.



THIS IS QUITTING

www.truthinitiative.org/thisisquitting

This is Quitting is the Truth Initiative's free cessation program to support youth and young adults in quitting vaping. Students can text DITCHVAPE to 88709 or enter their mobile phone numbers on the website for free support quitting.



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The California Youth Advocacy Network (CYAN) is dedicated to supporting youth and young adults by advocating for a commercial tobacco-free California.

We provide public health professionals and young people with the tangible tools for action to mobilize a powerful statewide movement.

Our staff is committed to changing the commercial tobacco use culture in California's K-12 schools, colleges and universities, and all areas of the youth and young adult community.

FOR ADDITIONAL INFORMATION CONTACT:

Symphanie Algodon, College Program Coordinator

symphanie@cyanonline.org

(916) 339-3424, ext 26

www.CATobaccoFreeColleges.org

www.cyanonline.org

