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## **Smokefree Outdoor Recreational Areas**

Global Advisors on Smokefree Policy<sup>1</sup> ("GASP") has many health concerns regarding outdoor secondhand smoke (SHS), which are documented in this paper.

There is growing concern that outdoor secondhand smoke can pose a health hazard to both people and the environment. Recent studies show outdoor exposure to concentration levels of SHS can exceed current U.S. EPA limits on fine particulate matter pollution, and SHS concentrations in a variety of outdoor settings can be comparable to those in smoky indoor settings. Children and the elderly are particularly susceptible to SHS exposure. Even brief exposure to SHS can trigger serious health problems for asthmatics of all ages, and people with compromised cardiovascular systems.

There is a compelling basis to institute smoking bans to protect individuals in outdoor settings. In New Jersey, only 15% of the adult population smokes - 85% do not smoke. More than 240 local NJ governments have shown support for smokefree air outdoors by enacting hundreds of ordinances to protect health, control litter, reduce fires, guard infants and animals from ingesting poisonous tobacco butt waste, and reduce environmental toxicity. A November 2011 CDC report cites that 69% of smokers want to quit, and they are encouraged to do so when visiting 100% smokefree environments. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6044a2.htm?s cid=mm6044a2 w

On August 6, 2012, the CDC launched "Protecting Your Children from Tobacco" which encourages communities to "Ban smoking in public places—such as workplaces, schools... and parks" to help prevent children from smoking.

http://www.cdc.gov/features/BackToSchool/

### Outdoor bans help:

- Protect people, especially children who congregate at parks, playgrounds and beaches, from secondhand smoke. Studies show that concentrations of outdoor SHS can equal indoor SHS levels.
- Set a standard that promotes public health by creating healthful environments for outdoor exercise and activities, and helps to normalize smokefree environments.
- Promote community efforts to "go green" and be environmentally friendly.
- Eliminate the concern of discarded cigarette butts that are ingested by children and animals.
- Improve oceanic and marine life with lower toxicity levels by reduced butt waste in lakes, bays and oceans.
- Reduce litter, which lowers municipal county and state clean-up costs for recreational areas.
- Reduce accidental fires caused by discarded cigarette butts in forests and parks.
- Facilitate the preservation of land and water for conservation and recreational purposes.

The following information outlines the trend with supporting data to create 100% smokefree policies for parks, playgrounds, recreational areas, athletic fields, swimming pools, and beaches.

# 1. New Jersey state, county and local legislation, regulations, and policies show support for smokefree outdoor environments:

<sup>&</sup>lt;sup>1</sup> Global Advisors on Smokefree Policy (GASP) is a 40-year old nonprofit resource center, dedicated to promoting smokefree air and tobacco-free lives. GASP is funded by the New Jersey State Department of Health, private foundations and donations.

On June 26, 2014, both the NJ Assembly and Senate overwhelmingly voted in favor of a state bill to make all State, county and local public parks, recreational areas and beaches 100% smokefree. The bill allows for municipalities with beaches to enact a local law that allows up to 10% of the beach be smoking-permitted. Exempted would be public golf courses, wildlife refuges and reservoirs, unless the county or municipality has a law that is equal to or stronger than the state bill (e.g. local law bans smoking at all local parks, including the golf course). New Jersey's Governor vetoed the bill in September 2014, but issued a statement encouraging local and county jurisdictions to continue the passage of such ordinances. The NJ Legislature can seek an override of the Governor's veto during the current legislative session, which ends January 2016.

In the meantime, the 2006 New Jersey Smoke-Free Air Act (NJSFAA) bans smoking outdoors in these locations (including a ban on the use of electronic smoking devices in such locations as of 2010):

- On all public and private K-12 school grounds, N.J.S. 26:3D-58; N.J.A.C. 8:6-7.1 and 2. http://www.njgasp.org/sfaa 2010 w-ecigs.pdf
- At all playgrounds, and recreational places owned by local municipalities, private entities or other individuals during those times when the school district has exclusive use of a portion of such land, N.J.A.C. 8:6-7.2(b)(3). <a href="http://njqasp.org/nj">http://njqasp.org/nj</a> admin code.pdf
- At an exterior area if smoking in the exterior area results in migration, seepage, or recirculation of smoke to an indoor public place or a workplace at which smoking is prohibited, N.J.A.C. 8:6-2.3 (a) and (b). http://www.njqasp.org/nj admin code.pdf

**Hundreds of New Jersey municipalities and counties have enacted laws** that restrict smoking in parks and recreational areas, since the NJSFAA has strong "no preemption" language. 263 municipalities and 13 counties have enacted 340 laws that restrict outdoor smoking in various recreational areas including:

- Parks, playgrounds, and recreational fields (314 ordinances in 253 municipalities and 13 counties including Atlantic, Bergen, Burlington, Camden, Cape May (zoo), Essex, Hudson, Mercer, Monmouth, Morris, Passaic, Somerset, and Union)
- Boardwalks, marinas, and ocean, bay and lake beach areas (42 ordinances in 30 municipalities)
  - Seaside Park has 100% smokefree beaches and boardwalks. Sunset Beach in Lower Township (Cape May County) is 100% smokefree. Long Branch has 100% smokefree beaches, and Belmar has 100% smokefree boardwalks and nearly the entire beach is smokefree.
  - Belmar was one of the first in the country to restrict smoking on both their beaches and boardwalk (April 2001), and the first summer after the ordinance was enacted, beach tag revenues increased by 17.6%. http://www.nigasp.org/Belmar\_beach\_ordinance\_sf\_effects\_article.pdf
- Swimming pools (53 ordinances in 44 municipalities and 3 counties including Bergen, Somerset, and Union)
- Amusement parks and zoos (4 ordinances in 2 municipalities and 2 counties)
  - 2 counties and 1 municipality have banned smoking at zoos to protect the patrons, especially the children, and the well being and safety of the animals as well as potential damage to surrounding vegetation: Essex County Turtle Back Zoo, Cape May County Zoo, and Cohanzick Zoo in Bridgeton, NJ.
  - o In 2007 Jackson Township banned smoking at amusement parks, including Six Flags Great Adventure, except in designated smoking areas.

**Hundreds New Jersey municipalities and counties have enacted laws that create smokefree setback zone** from government buildings or property: 99 ordinances in 86 municipalities and 7 counties (including Atlantic, Burlington, Hudson, Monmouth, Somerset, Sussex and Union) regulate outdoor smokefree perimeters around or near government-owned facilities. Smokefree setback zones range from 10 to 50 feet from entrances, exits, windows and/or perimeters of government buildings, and some laws require all government property, including outdoors, be 100% smokefree.

**New Jersey has a state law that requires all "resource family homes"** (foster homes, adoptive homes, family friend homes and relative care homes) and cars that transport a resource family child, be 100% smokefree. The law also requires it be 100% smokefree outdoors when a resource family child is present. N.J.A.C. 10:122C-7.2(a)(3) adopted by the Department of Human Services on

December 19, 2005, effective February 6, 2006 (from the Manual of Requirements for Resource Family Parents at http://www.state.nj.us/dcf/divisions/licensing/RFmanual.pdf)

**New Jersey also has another state law (pre-dates the NJSFAA) that bans smoking in any public place:** "Smoking or carrying lighted tobacco may be prohibited by the owner or person responsible for operating any public place or by municipal ordinance under the authority of N.J.S.A. 40:48-1 and 2." Conspicuous posting of adequate notice of the prohibition is required. This law may also apply to outdoor area, including sports facilities. N.J.S.A. 2C:33-13(b).

**Business entities:** Many business owners have instituted 100% smokefree outdoor policies for their properties. In New Jersey, this includes the outdoor seating and pedestrian areas in the Meadowlands Sports Complex. College campuses are starting to implement 100% smokefree campus policies, and at least 100 hospital campuses in New Jersey have a 100% smokefree policy.

### 2. Legislation outside of New Jersey:

New York City: NYC banned smoking, including banning the use of electronic smoking devices, at all five borough outdoor recreational areas under the jurisdiction of the city's Department of Parks and Recreation, as well as pedestrian plaza areas designated by the city's Department of Transportation:

- On May 23, 2011, New York City's 100% smokefree public parks and recreational areas ordinance too effect. Mayor Bloomberg signed the ordinance on February 22, 2011, and City Council passed it on February 2, 2011. The law covers all city outdoor recreational areas overseen by the city's Department of Parks and Recreation for all five city boroughs. The law covers 1,700 public parks and 14 miles of public beaches, specifically: "public parks, beaches, waters and land under water, pools, boardwalks, marinas, golf courses, playgrounds, recreation centers and all other property, equipment, buildings and facilities now or hereafter under the jurisdiction, charge or control of the department of parks and recreation." Pedestrian plazas are also included, such as Times Square, with a pedestrian plaza defined as "an area designated by the department of transportation for use as a plaza located within the bed of a roadway, which may contain benches, tables, or other facilities for pedestrian use." Fines are up to \$50 per offense.
  - Mayor Bloomberg's press release is at http://mikebloomberg.com/index.cfm?objectid=506896EA-C29C-7CA2-F1CBA42F41575D7C.
  - Read the 2011 NYC smokefree parks law and NYC Health Committee Report at http://legistar.council.nyc.gov/LegislationDetail.aspx?ID=773185&GUID=FD6CB044-E7FC- 497B-A487-7B9457D760FC&Options=&Search=.
  - Read the City Council's minutes approving the ordinance at http://www.njgasp.org/NYC\_Council\_Minutes\_2-2-2011.pdf
- On December 30, 2013, Mayor Bloomberg signed into law a ban on e-cigarette use inside
  public places and workplaces, and at all city public parks and recreational areas. The law took
  effect on April 29, 2014.

**New York State:** On May 10, 2013, New York State's Office of Parks, Recreation and Historic Preservation issued a regulation to make smokefree State parks, playgrounds, beaches and historic sites. <a href="https://www.governor.ny.gov/press/05102013Smoke-Free-Zones-Expanded-NYS-Parks">https://www.governor.ny.gov/press/05102013Smoke-Free-Zones-Expanded-NYS-Parks</a>. The regulation allows for some smoking designated areas by some campsites, open air picnic areas and undeveloped areas. This link lists the smokefree designated areas in the State parks <a href="https://nysparks.com/inside-our-agency/public-documents.aspx">http://nysparks.com/inside-our-agency/public-documents.aspx</a>

The State was sued soon thereafter by a pro-tobacco advocacy organization and on October 2013 a lower New York Court (state Supreme Court) judge ruled that the state parks agency did not have authority to ban smoking in state parks, and that this decision should be left to the legislature. <a href="https://www.njgasp.org/BloombergNews">https://www.njgasp.org/BloombergNews</a> NY parks policy blocked 10-11-13. This lower court ruling did not affect municipal and county laws that ban smoking in municipal and county parks. On December 31, 2014 a five-judge panel of the New York Appellate Division reversed the lower court decision, and allowed for the regulation to be reinstated. The case is NYC

C.L.A.S.H. v. New York State Office of Parks, Recreation and Historic Preservation, New York State Supreme Court, Appellate Division, Third Department, No. 519023.

On May 10, 2013, New York State's Office of Parks, Recreation and Historic Preservation issued a regulation to make smokefree State parks and recreational areas. https://www.governor.ny.gov/press/05102013Smoke-Free-Zones-Expanded-NYS-Parks. But on October 2013, a lower New York Court judge ruled that the state parks agency did not have authority to ban smoking in state parks, and that this decision should be left to the legislature. https://www.njgasp.org/BloombergNews\_NY\_parks\_policy\_blocked\_10-11-13. The ruling does not affect municipal and county laws that ban smoking in municipal and county parks.

**State, county and local jurisdictions across the United States**, and in commonwealth territories have passed 100% smokefree outdoor legislation. Review lists that cover parks, beaches, zoos, outdoor dining and outdoor public transit waiting areas at <a href="http://no-smoke.org/goingsmokefree.php?id=519#outdoor">http://no-smoke.org/goingsmokefree.php?id=519#outdoor</a>. In addition to NYC:

Boston banned smoking and electronic cigarette use in all city parks and recreational areas as
of January 1, 2014. On December 30, 2013 the Boston Recreation Commission approved of the
City Council's law. <a href="http://www.njgasp.org/boston-approves-ban-on-smoking-in-city-run-parks/">http://www.njgasp.org/boston-approves-ban-on-smoking-in-city-run-parks/</a>

Some U.S. States and cities ban smoking at certain parks or recreational areas, but not all areas:

- Maine bans smoking on State beaches.
- Oregon bans smoking at all State parks, as of 2014; approved by the Oregon Parks and Recreation Commission, except in private vehicles and at rented tent sites. As of August 2014, the Commission is considering a ban on all Oregon coastline, which is State-owned and managed by the Commission (vote expected in October 2014). <a href="http://www.dispatch.com/content/stories/national\_world/2014/08/21/state-may-ban-smoking-along-363-mile-coastline.html">http://www.dispatch.com/content/stories/national\_world/2014/08/21/state-may-ban-smoking-along-363-mile-coastline.html</a>
- Puerto Rico bans smoking at all public and private "recreational installations" which are defined as "any park, playing field, court, swimming pool, pinball or video game machines room, stadium, coliseum, and any area or place designated or commonly used for games or to hold sports, entertainment or passive recreational activities, competitions and professional or amateur sporting events." Definition does not include beaches. ("Recreational installation" is defined at 24 L.P.R.A. § 2411a (2013); "Smoking is prohibited at all times in the following places: (n) Public or private recreational installations" at 24 L.P.R.A. § 892(n) (2013)). <a href="http://www.lexisnexis.com/hottopics/lawsofpuertorico/">http://www.lexisnexis.com/hottopics/lawsofpuertorico/</a>
- **Philadelphia** recreational center properties, including playgrounds and pools, are smokefree as of July 1, 2011.
- **Hawaii** In April 2013, the Honolulu Mayor signed into law the City Council's ordinance to make all city beaches and parks smokefree on the south shore of Oahu. On April 22, 2014, the Maui County Council passed a similar law. In February 2013, State of Hawaii legislators introduced HB325 to make all state beaches smokefree; bill passed first reading referred to committee; re-introduced in 2014.

http://www.khon2.com/2013/04/08/new-law-makes-smoking-illegal-at-several-oahu-beaches-parks/

http://www.mauiweekly.com/page/content.detail/id/510974/Ban-Smoking-On-Beaches.html http://www.capitol.hawaii.gov/measure\_indiv.aspx?billtype=HB&billnumber=325&year=2013

Effective June 1, 2013, Russia implemented a smoking ban for public places that covers playgrounds and sports facilities as well as other public outdoor areas. http://www.njqasp.org/Russia-Media.ru sf law Russia May-2013.pdf

**Designated stretches of heavily used pedestrian areas and walkways** in the U.S. and abroad are being protected through smokefree legislation.

• In August 2014, Gloucester City banned use of tobacco products and electronic smoking devices on the outside property of the Monmouth Street business district from Atlantic Street

- to Railroad Avenue. Includes all streets, sidewalks, stoops, curbs, steps, and Atlantic Street and Railroad Avenue roadways.
- In August 2014, Golden Colorado's City Council voted unanimously to ban smoking on all sidewalks on and around Washington Avenue effective Jan. 1, 2015. <a href="http://www.njgasp.org/golden-colorado-bans-smoking-on-public-sidewalks-and-at-outdoor-recreational-areas/">http://www.njgasp.org/golden-colorado-bans-smoking-on-public-sidewalks-and-at-outdoor-recreational-areas/</a>
- As of August 2012, the Durham County, NC Board of Health prohibits smoking on sidewalks, in parks and other public outdoor spaces.
   <a href="http://www.nigasp.org/Durham County NC BOH od sf ordinance 8-12.pdf">http://www.nigasp.org/Durham County NC BOH od sf ordinance 8-12.pdf</a>
- As of January 2011, Great Neck, Long Island (New York) prohibits smoking on sidewalks in front of commercial buildings, Village Green Park and Housing Authority and on the benches in municipal parking lots.
   <a href="http://www.njgasp.org/locallaw1of2011">http://www.njgasp.org/locallaw1of2011</a> Great Neck sidewalk law.pdf
- On September 27, 2011, Concord City, California enacted an ordinance requiring a 17-block downtown business district be 100% smokefree, including banning the use of e-cigarettes. http://www.njgasp.org/Concord City CA downtown ord 09-11.pdf
- South Korea has designated a busy section of Main Street smokefree in the capital city of Gangnam, South Korea and violators will be fined beginning in March 2012 after a 3-month probationary period.
   <a href="http://www.njgasp.org/ArirangNews SKorea sf od 2-11-12.pdf">http://www.njgasp.org/ArirangNews SKorea sf od 2-11-12.pdf</a>
- As of February 16, 2008, Calabasas, California prohibits smoking on all streets, sidewalks, and outdoor plazas, shopping mall outdoor common areas including outdoor eating areas, play areas and parking lots, bars, restaurants, clubs, stores, and all outdoor recreational areas including but not limited to parks, playgrounds, gardens, sporting facilities and stadiums. <a href="http://www.cityofcalabasas.com/secondhandsmoke.html">http://www.cityofcalabasas.com/secondhandsmoke.html</a>
- Boulder Colorado's Pearl Street ban, 6-4-5.5
- Ithaca New York's Commons ban on smoking, § 280-4
- Mobile Alabama's ban on smoking on sidewalks in the Downtown Mobile Business Improvement District Chapter 27, Art. IV sec. 27-62
- Santa Cruz California's downtown sidewalk and street smoking ban 6.04.060
- Charleston South Carolina Hospital district ban. <u>Article VI Sec. 21-133</u>
- Rochester, MN has adopted a Smoke-Free Library Zone and Medical Zone http://www.rochestermn.gov/departments/attorney/ordinances/Ch85GeneralRegulations.asp
- Boise, ID enacted a smoking ban on Grove Plaza and Eighth street, and temporary events http://cityclerk.cityofboise.org/media/223658/69476 0623.pdf
- Rehoboth Beach, DE ban on smoking on boardwalk and bandstand area.-<a href="https://imageserv11.team-logic.com/mediaLibrary/8/AdoptedOrdNo 0314-01RegulationOfSmokingInPublicPlacesNoSigBlock031014.pdf">https://imageserv11.team-logic.com/mediaLibrary/8/AdoptedOrdNo 0314-01RegulationOfSmokingInPublicPlacesNoSigBlock031014.pdf</a>

The Center for Tobacco Policy and Organizing with The American Lung Association of California published a 2012 resource on effective comprehensive outdoor secondhand smoke ordinances. <a href="http://www.njqasp.org/Comprehensive">http://www.njqasp.org/Comprehensive</a> OD SHS Ordinances 02-2012.pdf

In November 2012, the US District Court of Appeals For the 8th Circuit, which represents Eastern Missouri, upheld the lower court's dismissal of a lawsuit involving a plaintiff who challenged a city ordinance in Clayton that prohibits outdoor smoking in city parks. Both court decisions support the

right of municipalities to pass ordinances restricting smoking in outdoor public places. http://www.njqasp.org/gallagher-v-clayton-appeal-ruling-11-8-12.pdf

## 3. Studies that show measurable harmful effects from secondhand smoke exposure outdoors:

Outdoor SHS is determined by the density of smokers, the wind velocity (direction and speed), and the stability of the atmosphere. During continuous smoking, SHS levels outdoors may be as high as SHS indoors.

- An October 2013 study published in the journal Nicotine and Tobacco Research by Seoul
  National University researchers, concluded that the minimum distance from a smoking source
  to prevent OTS exposure should be at least 9 meters (more than 27 feet). They studied
  outdoor concentrations of particulate matter at four distances from a simulated smoking
  source. <a href="http://www.njgasp.org/">http://www.njgasp.org/</a> DailyMail Korean od air study 1-22-13.pdf
  <a href="http://ntr.oxfordjournals.org/content/early/2013/11/10/ntr.ntt178.abstract.html?papetoc">http://ntr.oxfordjournals.org/content/early/2013/11/10/ntr.ntt178.abstract.html?papetoc</a>
- 2010 study of children exposed to secondhand smoke between ages 8 to 13 are more likely to show thickening of blood vessel walls, a precursor to hardening and clogging of arteries. Children exposed to the most SHS had higher levels of apolipoprotein B, which contributes to "bad" cholesterol, another heart disease risk factor. The findings suggest that children should not be exposed to SHS at any level; even small amounts of SHS exposure may be harmful for blood vessels. The researchers concluded that children need to be provided with a smokefree environment. Circulation: Cardiovascular Quality and Outcomes, A Journal published by the American Heart Association, March 2010. <a href="http://www.njgasp.org/Kallio">http://www.njgasp.org/Kallio</a> 2009 study-SHS increasing risk of childhood arterial blockage.pdf
- 2009 study to SHS exposure at outdoor bars and family restaurants in Athens, Georgia, using salivary cotinine. Conclusion: Nonsmokers outside restaurants and bars in Athens, Georgia, had significantly elevated salivary cotinine levels indicative of secondhand smoke exposure.

The objective of this study was to measure salivary cotinine, a metabolic byproduct of nicotine, in 21-30 year olds exposed to SHS outside bars and restaurants in Athens, Georgia. The study, one of the first to assess levels of cotinine in nonsmokers exposed to SHS outdoors, found levels up to 162% greater than in the control group that was not exposed to outdoor SHS. The results were published in the Journal of Occupational and Environmental Hygiene.

The team found an average increase in cotinine of 162% for the volunteers stationed at outdoor seating and standing areas at bars, 102% for those outside of restaurants, and 16% for the control group near the library. Cotinine levels in the volunteers at the bar setting saw their levels increase from an average pre-exposure level of 0.069 nanograms per milliliter (ng/ml), to an average post-exposure level of 0.182 ng/ml. The maximum value observed, however, was 0.959 ng/ml. To put that number into context, a widely cited study has determined that an average cotinine level of 0.4 ng/ml increases lung cancer deaths by 1 for every 1,000 people and increases heart disease deaths by 1 for every 100 people.

The University of Georgia, College of Public Health, Department of Environmental Health Sciences, Athens, Georgia, Hall JC, Bernert JT, Hall DB, St. Helen G., Kudon LH, Naeher LP <a href="http://oeh.informaworld.com/soeh/content~content=a914966130~db=all~jumptype=rss">http://oeh.informaworld.com/soeh/content~content=a914966130~db=all~jumptype=rss</a>

- 2009 Australia study SHS exposure (PM2.5) in outdoor dining areas. Conclusions: When individuals sit in outdoor dining venues where smokers are present, it is possible that they will be exposed to substantial SHS levels. Significant increases in exposure were observed when monitors were located under overhead covers, and as the number of nearby smokers increased. The role of outdoor smoking restrictions in minimizing exposure to SHS must be considered. Cameron M, Brennan E, Durkin SJ, Borland R, Travers MJ, Hyland A, Wakefield MA, Cancer Council Victoria, Australia, Tobacco Control 2009 Oct. 21. <a href="http://tobaccocontrol.bmj.com/content/early/2009/10/21/tc.2009.030544.abstract">http://tobaccocontrol.bmj.com/content/early/2009/10/21/tc.2009.030544.abstract</a>
- <u>2008 Fact Sheet on outdoor air pollution from SHS by researcher James Repace:</u> Field studies and controlled experiments demonstrate that, regardless of which way the wind blows, an

individual in an outdoor cafe, transiting through a building doorway, or otherwise surrounded by a group of smokers, is always downwind from the source. Under some conditions, levels of outdoor SHS can be as high as indoor levels of secondhand smoke (SHS). Some studies and conclusions cited in the fact sheet: \*\*

- 1. California: The Air Resources Board study (CARB, 2006), measured SHS nicotine concentrations outside an airport, college, government center, office complex, and amusement park. CARB found that at these typical outdoor locations, Californians may be exposed to SHS levels as high as indoor SHS concentrations.
- 2. In August 2003, researchers measured outdoor SHS respirable particle pollution in five outdoor cafes and on city streets in downtown Helsinki. Results found that air pollution levels in Helsinki outdoor cafes with many smokers during August 2003 were 5 to 20 times higher than on the sidewalks of busy streets polluted by bus, truck, and auto traffic. The results were presented by researchers at the 2006 World Conference on Tobacco or Health in Helsinki, Finland. \*\*
- 3. In 2005 researchers in Maryland measured outdoor fine particle and carcinogen concentrations from outdoor SHS on the University of Maryland Baltimore campus. SHS levels approached background levels either for fine particles or carcinogens until about 23 feet from the source. \*\*
- 4. Caribbean: Experiments conducted on a cruise ship traveling at 20 knots at sea in the Caribbean showed that SHS levels in various smoking-permitted outdoor areas of the ship tripled the level of carcinogens to which nonsmokers were exposed relative to indoor and outdoor areas in which smoking did not occur, despite the strong breezes and unlimited dispersion volume. Moreover, outdoor smoking areas were contaminated with SHS to nearly the same extent as a popular casino on board in which smoking was permitted. \*\*
- \*\* James L. Repace, MSc., Visiting Assistant Professor, Tufts University School of Medicine, and Repace Associates, Inc., 101 Felicia Lane, Bowie, MD 20720 U.S.A., <a href="http://www.repace.com/pdf/OTS">http://www.repace.com/pdf/OTS</a> FACT SHEET.pdf
- 2007 Stanford University Study on real-time measurement of outdoor tobacco smoke particles.
  Measured SHS respirable particle concentrations in outdoor patios, on airport and city
  sidewalks, and in parks. Concluded within about 2 feet of a smoker outdoor SHS was quite
  high and comparable to SHS concentrations measured indoors, and levels measured at two
  sidewalk cafés were detectable at distances beyond 13 feet. Researchers surmise:
  - 1. Children who accompany a smoking parent or guardian may experience substantial exposure.
  - 2. Support for health-based outdoor SHS bans may lie in a potential acute effect on susceptible populations. Short-term OTS exposure might be life threatening for high-risk persons, since the human cardiovascular system is very sensitive to secondhand smoke.
    - Klepis, Ott, and Switzer, <a href="http://news-service.stanford.edu/pr/2007/pr-smoke-50907.html">http://news-service.stanford.edu/pr/2007/pr-smoke-50907.html</a>

#### 4. Environmental hazards and litter:

Discarding cigarette butts can start fires that may destroy a forest, park, field, home or office building. A fire attributed to a cigarette butt thrown by a worker from a second-floor balcony burned down a Commercial Wharf office building perched on wood pilings in Boston Harbor. Fire fighters suffered injury and damage was estimated at \$3 million. <a href="http://www.njgasp.org/boston.com-wharfire-blamed-on-cigarette-5-5-2011.pdf">http://www.njgasp.org/boston.com-wharfire-blamed-on-cigarette-5-5-2011.pdf</a>

**Environmental hazard of cigarette filters**. Every year 4.95 trillion cigarette filters are discarded globally into our environment and many are found on sidewalks, beaches, parks, and other public

places and often end up in our waterways and washed back onto beaches. Cigarette filters can take many years to decompose but they are not 100% biodegradable. As filters break down, they leach toxic chemicals into watersheds, streams, lakes, and oceans, and are hazardous and highly toxic to fish, birds, other wildlife, plus pets and young children if they are ingested. Carried as runoff from streets to drains, to rivers, and ultimately to the ocean and its beaches, cigarette filters are the single most collect item each year in international beach cleanups. http://www.cigwaste.org

Read a <u>Legacy Tobacco Fact Sheet: The Impact of Tobacco on the Environment</u>. For more information at Legacy's website in English and Spanish:

http://www.legacyforhealth.org/our-issues/cigarettes-and-the-environment/help-us-stop-toxic-litter http://www.legacyforhealth.org/our-issues/cigarettes-and-the-environment/detengamos-lacontaminacion-toxica

In 2013, cigarette-related debris ranked as the 3rd most collected type of litter for the twice-yearly Clean Ocean Action beach sweeps in New Jersey. 32,303 cigarette filters, 4,842 cigar tips, 1,561 cigarette packagings, and 993 cigarette lighters were collected, which totals 12.21% of all litter collected. See <a href="http://www.nigasp.org/wp-">http://www.nigasp.org/wp-</a>

content/uploads/2015/06/COA 2013 Beach Sweep Annual Report.pdf Clean Ocean Action's 2013 reports lists "10 Tips for the Beach" include "The Beach is not an ashtray. [Cigarette filters] do not biodegrade and are highly toxic to marine animals that mistake them for food." Learn more about how cigarette filters harm the environment at <a href="http://cleanoceanaction.org/index.php?id=161">http://cleanoceanaction.org/index.php?id=161</a>

In 2012, cigarette-related debris again ranked first for the twice-yearly Clean Ocean Action beach sweeps. <a href="http://www.njgasp.org/NJ.com">http://www.njgasp.org/NJ.com</a> Cigarette butts top list of litter 4-16-13.pdf. In 2011, Cigarette-related debris ranked 5th for the first time in 19 years of holding one of the top 3 spots, but this proved to be short-lived. Smokefree Belmar Beach Mayor Matthew Doherty is quoted, "The ban on smoking has had a positive impact on our beach. We always have people who oppose it, but the benefit far outweighs any inconvenience someone may have. People are becoming accustomed to smoking bans in public places."

http://www.njgasp.org/NJ.com Cig butts down list of beach garbage 4-11-12.pdf

Alliance for a Living Ocean conducted a Long Beach Island, NJ beach clean up, for its 17th annual Earth Day Clean-up on April 24, 2010. The most common trash item was cigarette butts. Cigarette lighters, cigar tips and tobacco packaging/wrappers were also collected. http://www.livingocean.org/assets/earthday2010\_cleanup.pdf

In 2011, cigarette-related debris ranked 5th for most collected debris by the NJ Clean Ocean Action's organized beach cleanup. Belmar New Jersey's beach is smokefree, with Mayor Matthew Doherty quoted, "The ban on smoking has had a positive impact on our beach. We always have people who oppose it, but the benefit far outweighs any inconvenience someone may have. People are becoming accustomed to smoking bans in public places."

http://www.njqasp.org/NJ.com Cig butts down list of beach garbage 4-11-12.pdf

In 2010, 8,372 volunteers came together in record showing to collect an unprecedented amount of debris from the New Jersey shores on April 30 and October 22, 2010. Volunteers collected and recorded 475,321 pieces of debris, turning two days of work into a legacy of information that will drive policies and programs for years to come. Key findings: Out of top 12 marine debris items:

- ranked #3 = Cigarette filters accounted for 10% of debris picked up (ranked 2 in 2009, ranked in 2008, ranked 4 in 2007)
- ranked #8 = Cigar Tips accounted for 2% of debris picked up (ranked 12 in 2009, ranked 8 in 2008, not in top 12 in 2007)

	Spring Total	Fall Total	2010 Totals	Percentage of Total
Cigarette Filters	17731	28172	45903*	9.7%
Cigarette Lighters	1007	963	1970*	0.4%
Cigarette Packaging	1438	1459	2897	0.6%
Cigar Tips	5216	5112	10328*	2.2%

\* Denotes record amount

http://www.cleanoceanaction.org/index.php?id=778

The 2009 Annual Report found cigarette filters were the 2<sup>nd</sup> most recovered item, although it ranked first in previous years. Floating cigarette filters mimic fish, and filters have been found in the stomachs of birds and larger fish, blocking and affecting their digestion. Also, the filters are made of plastic fibers and trap carcinogenic chemicals that are introduced into animals' bloodstreams. All annual reports can be viewed at the Clean Ocean Action website: <a href="http://www.cleanoceanaction.org">http://www.cleanoceanaction.org</a>

NJ REBEL Clean-ups: NJ REBEL was a NJ statewide, youth-led tobacco-free movement, dedicated to educating peers, middle and elementary school children, and other members of the community about the dangers of tobacco use. NJ REBEL operated until July 2010 under the auspices of the New Jersey Department of Health and Senior Services' Comprehensive Tobacco Control Program when their program funding was eliminated. Read a presentation on the impact of cigarette litter on the environment, by Lauren Radano, the former Rebel Coordinator for Cumberland County, NJ.

Ten years ago on August 20, 2001, more than 700 NJ REBEL teens conducted a statewide beach sweep, cleaning litter from eight New Jersey beaches, and collected 38,000 cigarette butts in just 2 1/2 hours. Countywide NJ REBEL groups also conducted 2009 outdoor tobacco litter clean-ups:

- Atlantic County REBEL conducted cleanups at beaches and parks: two were in Atlantic City and one in Ventnor. The students picked up more than 3000 butts. The previous summer several cleanups were conducted and picked up more than 7,000 butts.
- Bergen County REBEL Clean-ups: 2,000 butts cleaned up by 16 REBEL students at Garden State Plaza. School Clean-ups: 8,000 plus butts cleaned up at 10 high schools and 5 middle schools in Bergen County.
- Camden County REBEL conducted a cleanup in Cooper River Park, Pennsauken. About 20 members from Camden Catholic High School, Cherry Hill, collected cigarette butts that filled a large jug.
- Hunterdon County REBEL, 50 students cleaned up their school campuses at Delaware Valley, North Hunterdon and Central, and Latino REBEL cleaned up The Flemington Arms Apartment complex, collecting 1,083 cigarette butts in June.
- Mercer County REBEL, 150 volunteers collected about 500 cigarette butts in a school grounds cleanup in June.
- Somerset County REBEL collected 2,500 cigarette butts.
- Warren County REBEL conducted on beach cleanup in June at Point Pleasant Beach with three high school chapters participating. They found about 3,000 cigarette butts along a small stretch of coast.

### 5. "Go Green" trend supports outdoors smokefree environments:

Outdoor smokefree recreational environments align with community efforts to promote "going green". Environmentally friendly plans should incorporate clean air and reduced litter, which decreases a community's carbon footprint.

 TripAdvisor's 2010 annual beach and pool etiquette survey of more than 2,000 U.S. travelers found that 83 percent believe smoking should be banned around the pool. Their 2009 survey of more than 3,000 travelers ranked smoking as the second most annoying beach and pool etiquette violations.

http://www.njgasp.org/TripAdvisor 2010 survey results.pdf http://www.njgasp.org/TripAdvisor 2009 survey results.pdf

Outdoor smokefree beaches and pools may cast a positive influence on travelers' destination decisions, and travelers are choosing environmentally friendly hotels:

- TripAdvisor's 2009 annual travel trends survey also found that thirty-four percent of U.S. respondents said they will visit an environmentally-friendly hotel or resort in the coming year, up from 30 percent in 2008. Thirty-two percent of those surveyed said they will be more environmentally conscious in their travel decisions this year, than they were the year before. In July 2008, only 26 percent said they would be more environmentally conscious. <a href="http://www.njgasp.org/TripAdvisor 2009 travel trends survey results.pdf">http://www.njgasp.org/TripAdvisor 2009 travel trends survey results.pdf</a>
- 1.5 million more tourists would be expected to visit a smokefree shore destination as estimated by an ICR Survey of potential Atlantic City visitors. http://www.njqasp.org/i economics ICR Survey News Brief.pdf

#### 6. Normalization of outdoor smokefree environments:

On August 6, 2012, the CDC launched "Protecting Your Children from Tobacco Use" which provides recommendations to parents on how to help children stay tobacco-free. Included in the category "What your Community Can Do to Help Prevent Youth Tobacco Use" is to "Ban smoking in public places—such as workplaces, schools... and parks".

The 2012 CDC booklet "Preventing Tobacco Use Among Youth and Young Adults" offers suggestions on how "policies and programs that contain several parts working together to make tobacco use more difficult and less accepted are the ones that work best. Policies are very effective because they can change the environment so that choosing a tobacco-free life is encouraged and supported." (p.13)

The US Department of Health and Human Services Office of Adolescent Health offers ideas for parents to help reduce acceptance of tobacco use by their teens. One of their bullets points out "The messages adolescents get from their community can either reinforce or undermine what they learn at home and at school. Of particular concern is if your neighborhood has a lot of unsupervised places and opportunities for teens. Teens are heavily influenced to use tobacco if they spend a lot of time in neighborhoods where other teens or adults use tobacco."

http://www.hhs.gov/ash/oah/resources-and-publications/info/parents/other-conversations/tobacco/tobacco-ideas.html

The Center for Disease Control and Prevention (CDC) states smokefree policies reduce smoking among all ages. By challenging the perception of smoking as acceptable adult behavior, smokefree policies can change the attitudes and behaviors of adolescents, resulting in a reduction in tobacco use initiation (Oxford University Press, October 2006). The study "Association Between Household and Workplace Smoking Restrictions and Adolescent Smoking" published in the *Journal of the American Medical Association* in October 2006, found that adolescents who work in smokefree workplaces are significantly less likely to be smokers than adolescents who work in workplaces with partial smoking restrictions.

http://jama.ama-assn.org/cgi/content/abstract/284/6/717

Many high-profile athletes, coaches, agencies, and organizations joined CDC's tobacco-free sports movement, which includes agencies and organizations that support tobacco-free sports. Participants include CDC, World Health Organization, National Cancer Institute, National Clearinghouse for Alcohol and Drug Information, National SAFE KIDS Campaign, International Olympic Committee, Federation Internationale de Football Association, and many other sports leagues and youth organizations. <a href="http://www.cdc.gov/tobacco/youth/sports/index.htm">http://www.cdc.gov/tobacco/youth/sports/index.htm</a>

Minnesota's tobacco-Free Youth Recreation program began in 2000, and since that time has assisted more than 90 Minnesota cities and four counties in establishing tobacco-free policies for their parks beaches, athletic fields, playgrounds, and other recreational facilities. http://www.ansrmn.org/programs/tobacco-free-youth-recreation