

Health issues due to southern california beach pollutions research paper

[Environment](#), [Pollution](#)



Introduction

Arguably, the global pollution is tremendously in the rise. Many people visit the coastal region of Southern California Beach; hence, pollution is increasingly threatening the waters, which individuals play, and swim exposing them to the risk of illness. Studies show that approximately three beaches in Southern California were ranked the most dirtiest beaches in the nation, these included L. A County's Avalon, Doheny Beach, and Cabrillo Beach. Undeniably, beach vacations form an annual event among many people and families in the United States. As a matter of fact, beachgoers at most polluted beaches in Southern California bring back a lot of unwanted souvenirs from the vacation. This health issues caused by polluted beaches includes skin rashes, stomach flu, ear infection, as well as other illnesses caused by polluted waters in the beach. Undeniably, it is not a surprise that most beaches in Southern California are mostly polluted. Surfers in most cases suffer from sore throat as well as ear infections from the polluted beach waters. In fact, it has come to the realizations of many beachgoers that it is not advisable to enjoy swimming in the beach after the rains.

Problem in the Southern California beach pollutants

The problem of pollution exists in Southern California beaches, whereby many stakeholders have considered the issues important. Perhaps, the beach pollutions cause a lot of problems and, therefore, require a lot of policies to address these outcomes. The government and health care departments directly implement most preventive measures and policies. The prompt addressing of health care issues on beach pollution is based on

allocation, management and control of water. Water pollution refers to the introduction of substances by humans directly or indirectly, that result in harming living things, human health, marine life, as well as hindering marine activities. For many decades, human beings mostly treat the environment badly and disrespectfully, of which it will haunt peoples live (Environment & Heritage).

The problem of southern Carolina beach pollution is widely spread due to various reasons. In fact, the problem does not only affect southern California coast but every coastal region. In southern California beaches, closings have recently increased due to high level of microorganism found partially or untreated sewage waste. This problem is brought about by combined sanitary sewer outflows, malfunctioning sewage treatment systems, as well as sewer outflows (Peterson). Additionally, heavy rains potentially overload sewer systems leading to carriage of raw sewage into the Southern Californian beaches. The overflow from the sewage system pollutes the waters and waterways.

Moreover, another problem in southern California beaches is caused by malfunctioning skeptic systems and boating systems. Contaminated storm water runoff contributes to a good percentage of beach pollution. The stormwater system is developed in the urban areas of California so as to prevent flooding in the region, which thereafter flows in to Southern California Beaches (Brinks et al 127). Rain fall transport contaminants into stormwaters systems. These pollutants include oil, dog droppings, street litter, slit, cigarette butts, as well as slits. The strategies that have been placed to control beach pollution are not fully effective (Peterson). The

reliance of dry weather condition to control the contamination of beach pollution is no longer a long-term strategy in the protection public health.

Near the southern California beaches storm waters are discharged directly. Unlike sewage wastes, stormwaters are never treated before it is discharged into the beaches.

Wastewater treatment plants play tremendous roles in removing solids, collecting sewage, as well as treating wastewaters before it is released into the environs. In this case, these treatment plants could be the cause of beach pollution. The pollution comes as a result of malfunctioning systems, which may discharge partially treated wastes into the beach causing severe contamination of water. In Southern California, there are various underground sewage systems, which transport wastes and minerals from the business premises and homes (Environment & Heritage). This sewage network occasionally overflows due to blockage caused by tree root debris or intrusion.

Generally, rain is the most contributor of the stated problem. In that, heavy rains overwhelms sewage system and waterways, forcing direct transport of raw sewage into the southern California beaches, whereby it bypasses treatment systems. As rain water passes the land it carries with it all sorts of pollutants into the beach. Furthermore, noxious waste found in stormwater includes pet waste, motor oil, animal droppings, pesticides, as well as fertilizer (EPA United States Environment Protection Agency).

Importance of the problem

Undeniably, stating the problems of pollution and its causes is very critical in the formation and implementation of policies to control them. For many years, since the beginning of the industrial revolution, human beings have let loose approximately 85, 000 chemical agents into the environs and all these pollutants is now haunting the life's of people. The cause of pollution is crucial information since it forms the basis of all other ways of controlling and reducing beach pollution. As a matter of fact, various people do not believe that beach pollution affect their life; hence, stating and explaining the problem makes them be careful and be part of environmental conservation (EPA United States Environmental Protection Agency).

The importance of elaborating on beach pollution is because there is the growing risk in the health of people visiting the beach. The centers for CDC (Disease Control and Prevention) assert that infections and diseases associated with beach waters are always at an increase. Hence, this shows that unless the issues related to southern California beach contamination is addressed, many people swimming and having fun will in beachwater will rise.

Southern California Beaches are very important economically. Conversely, it serves many tourists and earns the state a lot of revenue. For example, when the number of tourists increases, the state's economic output increases too. Therefore, pollution of southern California beaches puts into risk the many jobs and revenues that are earned from the coastal beaches of southern California. If the pollution in the beach waters increases, the state

will risk a lot of revenues, which could lead to financial crisis (Brinks et al 132).. The officials in charge of the Southern California Beaches may not be informed on the causes beachwater pollution. Hence, the problem is worth mentioning as it brings into awareness the various causes of beachwater pollution. The trends of beach closure have been caused by unknown sources of pollution (Peterson). Generally, the problem of pollution in the southern California is crucial since it has impacts on health of the public, as well as the economy. The addressing of the causes will focus on the improvement of beach water and reduction of water pollution. It is critical to address Southern California Beach since it leads to monitoring, preventing and tracking all sorts of beach pollution.

Public health concern/effects of beach pollution

In the recent past, many people are predisposed to different health related problems resulting from exposure to contaminated beach waters (Ahn et al. 5946). As mentioned herein, recreational waters of Southern California beaches are of much concern due to recent research indicators reflecting on close association between disease burdens with the mentioned beaches. On the contrary, a precise measure on the degree of association between beach contamination exposures to rate of related diseases has not been established. Deductively, the effects of beach contamination include the following;

Digestive system problems

Overall, pollution of recreational waters with regard to beach pollution causes problems to the human body as a whole. However, much emphasis is

laid on the digestive system due to presence of bacterium E. coli in contaminated recreational beach waters, which causes swimming related gastro intestinal disturbances (Beckman 87). The close association between bacterium E. coli and intestinal disturbances has led to its use as an indicator of contamination in recreational beach waters. Children are more predisposed to gastrointestinal infections as their immunity is lower. In addition, children are more likely to swallow contaminated beach water as they swim than adults. On the other hand, beach contamination due to other pathogens such as viruses, protozoa, as well as parasitic worms also causes myriad of diseases. Precisely, water contamination by the mentioned pathogens in recreational waters causes hepatitis, cholera, typhoid and dysentery (Ahn et al. 5950). In fact, illnesses mentioned herein are prevalent amongst populations utilizing the contaminated recreational waters in the Southern California beaches.

Cardiovascular diseases

Certainly, water plays a central role in the functioning of the human body. For this reason, contamination of beach water prejudices human existence, since unintended consumption of contaminated beach water in the events of swimming and other activities occurring in beach waters increases health issues resulting from unsafe water intake. Undeniably, people with cardiovascular diseases are more vulnerable to health problems resulting from intake of contaminated water (Laws 234). Precisely, contaminated beach waters are toxic (as they are saline) and high toxicity levels impairs functioning of human cardiovascular system. In fact, consumption of

contaminated water results in blood clotting. Blood circulates all over the body and in the process transport oxygen to the heart. Oxygen is an essential component in sustenance of human life. Consequently, blood clotting resulting from consumption of contaminated water impairs transport of oxygen to the heart, hence, causing heart attack. Deductively, contamination of Southern Californian beaches poses as a public health concern to persons utilizing the waters for recreational and other purposes, particularly those living with cardiovascular diseases. Research carried out in the recent past indicate that males aged over forty five years and females aged fifty five years are more predisposed to cardiovascular diseases (Beckman 254), particularly if they come in contact with contaminated beach waters. More research is ongoing on the relationship between water contamination and cardiovascular diseases.

Hair problems resulting from beach water contamination

Utilization of contaminated beach water for recreation and other purposes causes adverse effects on human hair. Precisely, contaminants found in contaminated beach water contain metal ores including those of selenium, which causes hair loss upon coming in contact with human hair (Given et al. 4856). In addition, water contaminants cause loss of hair color. Deductively, people with lighter hair color are more likely to suffer the effect of loss of their hair's color. On the other hand, mercury is another constituent of contaminated water, which also causes hair loss. Research indicates that sea foods acquired from contaminated water are high in mercury. To this purpose, presence of mercury in contaminated beach water contributes to

hair loss, which is a public health concern. Conversely, mercury found in contaminated beach water does not only cause hair, but causes other health problems including fatigue and headache. Beach water contaminated by petroleum products are bound to have high lead contaminant content. Research indicates that hair loss can result from lead poisoning. Overall, a number of beach water pollutants are high in heavy metal contaminants, which cause hair problems. Reports by the Natural Resource defense Council indicate that heavy metal contamination is prevalent in the Southern California beaches, which predisposes the residents to high incidences of hair loss because of heavy metal poisoning hair.

Eye sight problems caused by beach water contamination

Certainly, the eye is an essential organ, which is delicate and can be easily affected by various factors such as use contaminated water in cleaning of the eyes. Precisely, utilization of contaminated eye cleaning causes conjunctivitis, which an eyesight problem is caused by chemicals that get into the eyes. As previously connoted herein, contaminated beach water contains chemical contaminants. Therefore, utilization of contaminated beach water in Southern California is responsible for various eyesight problems reported by residents and visitors using the beaches for recreation and other purposes. Furthermore, contaminated beach water contains bacteria (Beckman 56), which can enter the eyes in the event of swimming and bathing in such beach waters and end up causing eye problems. Deductively, contaminated water causes allergic conditions to eyes evident by irritating sensation of the eyes and blood short eyes.

How to address public health issues caused by beach pollution

Reportedly, Southern California beaches including Doheny, Cabrillo, and Avalon are the most polluted beaches in the United States. For this reason, viable solutions should be generated towards solving this issue, which is undeniably a public health concern. Policies should be set aimed at monitoring and evaluating water quality of such beaches. Precisely, the policies should use certain indicators such as pathogen levels to determine the safety of beach waters (Matt 1). Therefore, beach waters with high levels of contamination should be closed. Historically, a number of policies and regulations have been set seeking to address this problem but they have not achieved their purpose. To effectively address this issue, a complete overhaul on such policies should be carried out to set flexible policies, which can effectively address these concerns. Re-streamlining of these policies will prevent beach water contamination of any form. Since Southern California beaches have been adversely affected by the problem of beach pollution, the state of California should adopt water quality principles purposed at monitoring beach water and their respective risks.

In addition, science and technology can offer solution capable of addressing diseases as a result of water contamination. Speaking of technology, these refer to procedures to enhance safety of recreational beach water. Science and technology offers processes essential in purifying water contaminated by bacteria and heavy metals. This enhances attainment of balance in PH of beach water, hence, reducing effects resulting from utilization of contamination of beach water (Laws 64). In fact, science and technology has

set standards essential in measuring water quality, which have been recommend for use by the World Health Organization.

Work Cited

Ahn, JH, Grant, SB, Surbeck, CQ, Digiacomio, PM. Nezlin, NP, & Jiang, S.

Coastal water

quality impact of storm water runoff from an urban watershed in southern California.

ENVIRONMENTAL SCIENCE & TECHNOLOGY Volume: 39 Issue: 16 Pages:

5940-

5953 DOI: 10. 1021/es0501464 Published: AUG 15 2005.

Beckman. Marine environmental biology and conservation. Orlando: Jones &

Bartlett

Publishers.

Brinks, MV., Dwight, RH., Osgood, ND., Sharavanakumar, G., Turbow, DJ., El-

Gohary, M.,

Caplan, JS & Semenza, JC. Health Risk of Bathing in Southern California

Coastal

Waters Archives of Environmental & Occupational Health Volume: 63 Issue: 3

Pages:

123-135 DOI: 10. 3200/AEOH. 63. 3. 123-135 Published: FAL 2008

Environment & Heritage. Water Pollution. Retrieved on May, 3, 2012, From

<http://www.environment.nsw.gov.au/beach/Waterpollution.htm>

EPA United States Environment Protection Agency. Beach Pollution.

Retrieved on May, 22. 2012, from <http://water.epa>.

<https://assignbuster.com/health-issues-due-to-southern-california-beach-pollutions-research-paper/>

gov/type/oceb/beaches/pollution. cfm

EPA United States Environmental Protection Agency. Action Plan for Beaches and Recreational

Waters. Retrieved on March 1999, from

<http://www.epa.gov/ord/htm/documents/600r98079.pdf>

Given, S., Pendleton, L.H., & Boehm, Alexandria B. Regional public health cost estimates of

contaminated coastal waters: A case study of gastroenteritis at southern California

beaches. ENVIRONMENTAL SCIENCE & TECHNOLOGY Volume: 40 Issue: 16

Pages: 4851-4858 DOI: 10. 1021/es060679s Published: AUG 15 2006

Laws, Edward. Aquatic pollution: An introductory text. London. John Wiley and Sons. 2000.

Matt, Flegenheimer. " City closes 4 beaches after Harlem sewage discharge".

New York Times 27

July, 2011: All. Print.

Peterson, M. Beach Pollution Still a Problem, NRDC Says. Southern California,

Retrieved on

June, 29, 2011, from <http://www.scpr.org/news/2011/06/29/27501/testing-waters->

[california-beach-pollution-remains-/](http://www.scpr.org/news/2011/06/29/27501/testing-waters-california-beach-pollution-remains-/)