



COVID-19

NATIONAL PUBLIC HYGIENE STRATEGY AND IMPLEMENTATION PLAN

PREFACE BY THE ACTING DIRECTOR-GENERAL

The National Public Hygiene Strategy and Plan set out a comprehensive approach to the delivery of community and general hygiene measures in South Africa in light of the COVID-19 epidemic and beyond. The strategy in broad terms highlights the framework within which public hygiene interventions, education and awareness should be implemented to delay, reduce and curb the spread of COVID-19 in South Africa.

The strategy outlines how government departments and entities and other stakeholders should work together to ensure a coordinated and consistent country approach towards heightening public hygiene measures in the control of the outbreak. While it is anticipated that national strategy will provide strategic direction and guidance on planning to support a consistent and coordinated response across jurisdictions, provinces and municipalities have ultimate responsibility for planning and implementation within their respective jurisdictions.

The strategy promotes 3 (three) measures to be focused on for public hygiene interventions, i.e. Public education and awareness, community-based measures and personal protective measures, with emphasis on the challenges facing our rural and informal areas where sanitation issues are of critical importance.

The targets set out in the strategy's implementation plan will be monitored by a Task Team established to coordinate public hygiene measures during the COVID-19 outbreak in the country. To meet these targets will require a committed, concerted and collaborative effort on the part of all in pursuant. The latter is due to the fact that the strategy identifies a number of priority areas and actions to be taken by various government departments and stakeholders in order to achieve the objectives of the strategy.

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EXECUTIVE SUMMARY

Introduction

As the on-going Coronavirus Disease (COVID-19) pandemic continues to develop, the Department of Health is committed to working together with all government departments, government spheres and stakeholders on a public health response. A key approach to this response is improved <u>public hygiene interventions</u> to control and prevent the spread of the virus. Many South Africans live in settlements where the risk of contracting a water and sanitation related disease is high and the risk is often due to poor access to safe water and sanitation services and due to unsafe hygiene practices.

Public hygiene interventions can play an important role in reducing and preventing the spread of the corona virus and in developing the necessary knowledge that will positively impact attitudes of both personal and community hygiene practices. Public hygiene measures need to be implemented in the short and medium term as part of COVID-19 response and in the long term as part of government and other district health services.

Public hygiene interventions must aim to reach the entire population and focus on high risk areas within communities, which shall include public gathering places, workplaces, public transportation, community events (weddings, funerals), and vulnerable areas low-cost housing, informal settlements and rural settings.

This strategy is structured as follows:

- <u>Section 1</u>: Describes the objectives of the strategy, and outlines the purpose, problem statement and aims of the strategy.
- Section 2: Provides key definitions and policy principles.
- Section 3: Sets out the delivery framework for public hygiene interventions and measures, the roles and responsibilities, funding, resource requirements and planning aspects of the delivery of hygiene promotion for communicable diseases control and implementation approaches.
- Section 4: Provides a strategy implementation plan which highlights key objects and associated actions and time frames that are to be activated by sector roleplayers. The progress made in relation to achieving these objects will be monitored by the Public Hygiene Task Team.

Institutional Arrangements

The National Department of Health a custodian of health and hygiene will lead the coordination of public measures to be implemented in the country. Other key roles include the following entities:

- Department of Water, Sanitation and Human Settlements (DWS); Water services sector leader;
- Department of Transport (DOT) Public transport;

- Department of Cooperative Governance and Traditional Affairs (COGTA) Local Government Support.
- Department of Basic Education (DBE) Basic Education.
- Department of Labour (DOL) Workplace environment.
- Department of Environment, Fisheries and Forestry (DEFF) Environmental hygiene, and waste management;
- Department of Social Development (DSD)

 Early Learning development and vulnerable groups;
- The South African Police Services (SAPS) Public Safety and Security.
- Metropolitan and District Municipalities Municipal health services, traffic services and other public amenities;
- South African Local Government Association (SALGA) Local Government lobby and support.
- Non-Governmental Organisations (NGOs) Government programmes support.
- The media Mass communication.

Public/public and public/private partnerships can help strengthen public hygiene improvement interventions delivery.

Target Groups

Public hygiene improvement interventions must target the broader community to achieve wide scale impact on knowledge, attitude and practice. Those most vulnerable to diseases and affected by other sicknesses, and living in conditions that predisposes them to infections must be targeted as a starting point. These target groups may need long term, ongoing health and hygiene education interventions.

Funding and Other Resources

Resources, such as human resources, material and equipment need to be adequately provided for by various identified government departments and entities, to ensure an effective public hygiene programme. The strategy advocates for funding to be made available from various sources.

Minimum Standards

Many hygiene promotion resources have been developed by various entities, however, there is a wide variation in terms of content and quality. Hence, there has been little uniformity in the delivery of hygiene education. Therefore, minimum standards for hygiene education and standards on the types of hygiene interventions are provided, with the aim to improve the uniformity and quality of public hygiene promotion and interventions in South Africa during the outbreak.

Planning

It is important that hygiene interventions are well planned at all levels. This will be achieved through collaborative planning. Planning of hygiene interventions must include identification of available resources, funding requirements, clarify roles and responsibilities, and develop an approach to the implementation of effective programme.

Implementation Approaches

The aim of public hygiene measures is improved community and environmental hygiene and increased knowledge, attitudes and practices to prevent the spread of the corona virus, and this is to be achieved in a short and medium term. Therefore public hygiene interventions and measures needs to be implemented effectively.

The strategy adopts the following key public hygiene promotion implementation approaches;

- 1. Public education and awareness;
- 2. Community based measures;
- 3. Personal protective measures;

Capacity building and training

Organisations involved with health and hygiene education delivery need to assess the capacity of their personnel and where necessary provide them with access to training and skills development related to hygiene education delivery. Building capacity at community level is important and providing access to training for existing health service providers, such as traditional healers, Community Health Workers, NGOs and Health Promoters is needed.

Monitoring, Evaluation and Reporting

Monitoring and evaluation will be vital to determine whether interventions and measures are achieving the desired impact. Strong emphasis on community based monitoring is needed. Monitoring at provincial and national level should focus on the progress in achieving national targets and utilisation of the services and will be coordinated by the public hygiene Task Team.

Strategic Work Plan

A work plan is developed to facilitate the implementation of the strategy. It identifies key objectives, related activities/actions and timeframes. Work plan progress will be monitored by the public hygiene Task Team, led by the Department of Health.

SECTION 1: INTRODUCTION

The National Public Hygiene Strategy and plan sets out the framework for the delivery of quality public hygiene interventions in the country by government and stakeholders, for the control of COVID-19 outbreak and beyond. The strategy takes into consideration best practice and experience internationally.

1.1 Aim

To improve and promote public hygiene and cleanliness as a key intervention to the delay and spread of Corona virus in South Africa.

1.2 Objectives

- (1) To provide minimum standards for public hygiene measures to ensure quality interventions:
- (2) To provide an approved approach to be adopted by all role players to ensure the delivery of effective public hygiene interventions;
- (3) To provide a framework to ensure that interventions are targeted at high risk areas and vulnerable communities;
- (4) To promote safe individual hygiene practices, such as washing hands with soap and the use of sanitizers, social distancing and proper cough and sneeze etiquette to reduce the risk of the spread of COVID 19;
- (5) To promote and improve community hygiene and environmental cleanliness;
- (6) To capacitate and empower communities with the education and knowledge on how to protect themselves against the disease;

1.3 Guiding Principles

Extensive experience has been gained both locally and internationally regarding the approach to implementing successful public hygiene programmes. The key Implementation principles are as follows:

Community Participation

The involvement of the community and local leadership structures at local level in all aspects of interventions will be important to ensure the relevance of interventions and acceptability.

Integration

Hygiene education and awareness must be integrated into:

- Primary health care programmes;
- Workplace wellness programmes;
- Community social, religious and traditional affairs.

Collaboration

Collaboration and partnership between key role-players is vitally important. This is especially important in planning for sustainable public hygiene interventions delivery. Collaboration should take place through co-ordination structures in all spheres of government.

Results oriented

Health and hygiene education programmes should have as an objective, the achievement of specific results that can preferably be measured, rather than just a general provision of information.

SECTION 2:

PUBLIC HYGIENE IMPROVEMENT IMPLEMENTATION FRAMEWORK

This section key requirements to ensure public hygiene interventions delivery, and include:

- 2.1 Public hygiene measures;
- 2.2 Public hygiene activities and messages;
- 2.3 Institutional Roles and Responsibilities
- 3. Guidelines for public hygiene measures;
- 3.1 Guidelines for promotion of personal hygiene;
- 3.2 Environmental cleaning and disinfection guidelines;
- 3.3 Waste management guidelines;
- 3.4 Water, Sanitation and Hygiene Guidelines;
- Public hygiene communication.

2.1 PUBLIC HYGIENE MEASURES

Public health hygiene measures can be implemented early and involve multidisciplinary collaboration, between and across health and non-health sector settings, including homes, workplaces, public and educational settings, ports of entry, various community-based service organizations and correctional facilities.

Public hygiene measures should focus on the following three (3) measures:

- Public education and awareness;
- Personal Protective measures; and
- Community-based measures.

Public education and awareness - Use of various educational materials and platforms to disseminate knowledge on safe individual and community hygiene practices.

Community-based measures - to reduce transmission of infection within community settings such as workplaces, schools, and communal living facilities, public places – i.e. promotion of social distancing measures, application of sanitary measures such as disinfection of surfaces in high traffic public places, environmental cleaning, environmental disinfection; and monitoring of environmental hazards.

Personal protective measures - hand hygiene promotion, such as respiratory etiquette, environmental cleaning of surfaces in homes to protect uninfected individuals, staying home when ill (self-isolation) to prevent the spreading of infection.

2.2 PUBLIC HYGIENE ACTIVITIES AND MESSAGES

Public bygiene activities should focus on the following key areas;

Public hygiene measures	Key message	Minimum Message	Activities
Public education	Breaking the cycle of disease	 Understanding Corona Virus transmission routes Creating affective barriers to disease transmission Hand washing with soap and use of sanitizers How to purify water for washing hands. 	Mass media, participatory approach Small group workshops House to house visits
Community based measures	Keep the environment hygienic	 Disinfect high touch areas at home and high traffic areas in public places; Keep the environment clean and manage waste safely; Avoid crowded places; Practice social distancing; Building local skills to provide alternative low-cost means for hygiene infrastructure. 	Mass media, participatory approach Small group workshops House to house visits Funerals, weddings, traditional gatherings, workplaces.
Personal protective measures	Practice good personal hygiene	 Wash your hands with soap/ use a hand sanitizers; Making water safe for washing hands with soap; Making own hand sanitizer; Avoid touching your face and mouth after touching surfaces; Stay home when ill; Keep homes clean and sanitized at all times. Take precaution when using a mask. 	Mass media, participatory approach; Small group workshops; House to house visits.

2.3 ROLES AND RESPONSIBILITIES OF STAKEHOLDERS IN PUBLIC HYGIENE

To combat the spread of corona virus in the country, a collaborative approach must be adopted, therefore various institutions must play key roles in improving, promoting and ensuring a hygienic environment, both at an individual and community level. The strategy therefore;

- Identify government departments and spheres and other stakeholders to play a role in promoting and improving public hygiene; and
- Clearly state their roles and functions in relation to public hygiene interventions and measures delivery in light of the corona virus.

Department	Key responsibilities/activities in public hygiene delivery
Department of Health	 Provide a framework to guide public hygiene measures by various stakeholders. Issue directive on public hygiene measures to be implemented; Coordinate public hygiene measures and provide leadership to stakeholders.
Department of Water Affairs and Forestry	 Ensure the provision of water and sanitation services, especially in high risk areas; Support Municipalities implementing water services and sanitation mandate during COVID 19. Scale up community health and hygiene awareness as part of water supply services.
Department of Cooperative Governance and Traditional Affairs	 Support Municipalities with resources to be able to implement public hygiene interventions; Make MIG funds accessible for provision of waste collection services for Municipalities. Provide Municipalities with resources to implement public hygiene interventions;
Department of Education	 Support district with resources to implement public hygiene interventions in schools; Issue directives to districts on health measures to be implemented in schools.
Department of Higher Education and Training	 Ensure availability of resources to enable Institutions of Higher Learning to implement hygiene measures. Issue directives to districts on health measures to be implemented in schools. Ensure compliance of Institutions of public gathering restrictions.
SALGA	 Support Municipalities in implementing public hygiene measures and interventions;
Department of Transport	 Provide resources to enable public hygiene measures to be implemented.

	 Communicate public hygiene measures to all sectors.
	 Provide support to the transport services to heighten hygiene measures and interventions);
Department of Environment, Fisheries and Forestry	 Establish the National Waste Management Strategy. Support municipalities to prepare Integrated Waste Management Plans and integrate with IDPs.
South African Police Services	 Provide resources to heighten hygiene measures in all public places (police stations etc).
Department of Public Works	 Support with human resources for community based interventions through the Expanded Public Works Programme.
Department of Social Development	 Provide resources to enable public hygiene measures to be implemented in ECD centers and other areas for vulnerable groups; Issue directive on public health measures to stakeholders and ensure compliance thereof.
Municipalities	 Commit sufficient resources to address public health measures, that will include; ✓ Provision of public hygiene facilities in high risk areas (water and handwash facilities and sanitizers); ✓ Issue directives on mass gatherings and entry and use of public amenities; ✓ Heightening education and awareness; ✓ Provision of disinfection services. Implement Regulations on Monitoring of public gatherings compliance to gathering restrictions;
Correctional Services	 Provide sufficient resources to enable implementation of public health measures in prisons and other correctional facilities. Issue directives on restriction of visits by the public to limit exposure; Heightening hygiene measures amongst inmates.
Private sector	 Provide public hygiene measures in all public places; Issue directive on mass gatherings in public places. Ensure compliance to public hygiene measures by all role players.
Media	 Mass communication and creating awareness on the importance of public hygiene to curb the spread of the virus, and on public health

	measures to be taken to prevent the spread of Coronavirus.
Non-Government Organisations	 Support public awareness and education promotion.

3. GUIDELINE FOR IMPLEMENTING PUBLIC HYGIENE MEASURES

3.1 GUIDELINES FOR PROMOTION OF PERSONAL HYGIENE

1) Hand hygiene promotion

Messages should be targeted, be simple and clear and easily understandable by the target audience;

Messages can be communicated using various mediums, such as posters, drama and storytelling, mass media messages, group discussions and home visits.

2) Key public hand hygiene messages;

Wash your hands with soap often at these critical times.

- Wash hands with soap for at least 20 seconds;
- Wash your after visiting the toilet;
- Wash your hands before handling food or eating;
- Wash your hands after taking care of sick people;
- Wash your hands after touching surfaces;
- Wash your hands after sneezing or coughing.

3) Additional messages

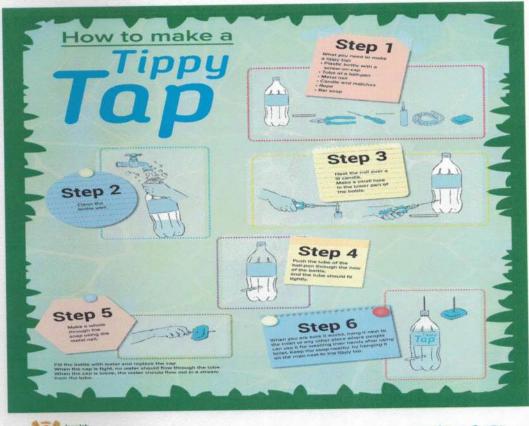
- Only use running water to wash hands;
- Avoid using common basins for washing hands as this will spread the COVID-19 virus, rather use a jug to pour for water to run;

4) Construction of self-made handwashing taps (Tippy Taps)

Education should include building local skills to enable construction of self-made handwash technologies using locally available material, i.e. Tippy Taps, especially in high risk areas (communities without adequate handwash facilities).

Tippy Taps can provide hygienic enabler environments for handwashing with running water.

How to make a Tippy Tap.







How to wash hands

Handwash promotion should include demonstrating to people the proper handwashing technique to ensure elimination of the virus from hands.

How to wash your hands with soap

- Wet hands and apply soap;
- Rub palms of hands together;
- Rub in between the fingers, back of hands and wrist;
- Clean underneath the nails;
- Rinse hands with clean running water;
- Dry with clean paper towel or shake hands in the air to dry.



5) Use of alcohol based hand sanitizers

- Washing hands with soap for at least 20 seconds is the key message to be
 promoted to individuals and communities, however Hand sanitizers can be also
 used to decrease infectious agents on the hands, where one is not close to a
 handwash facility.
- Sanitizers however should not be encouraged after using a toilet, and for visibly soiled hands - washing hands with soap should be encouraged at these times.
- Sanitizers should have alcohol content of at least 60% for maximum protection.
- Use sanitizer only on dry hands;
- If using gloves, sanitize hands before and after use.
- Do not sanitize and use water at the same time it is harsh for your skin.

How sanitize hands

- Apply the sanitizer to the palm of one hand (on a size of a R2 coin);
- Rub your hands together;
- Rub the gel over all the surfaces of your hands and in between fingers for at least
- 20 seconds until your hands are dry.



Image by Unisqo

6) Cough and sneeze etiquette messages

Education and awareness to include proper cough and sneeze etiquette.

Key messages

- Cover mouth and nose every time one coughs or sneezes. Use a disposable tissue to cover your mouth or nose.
- If a cough or sneeze sneaks up on you and no tissue is available, use upper sleeve.
- Avoid touching your eyes, nose and mouth.
- Wash hands with soap after each episode.





Image by Vikivisual

7) Other personal hygiene messages to promote personal hygiene

- Change clothes daily and wash them, especially for households with sick people;
- Take showers or baths daily;
- Do not share tooth brushes or face cloths;
- Do not share utensils of sick people with others;
- Do not share feeding utensils amongst children;

8) Social distancing messages

- Avoid close contact with people who are sick;
- Keep a distance of at least 1m with the next person;
- Avoid handshake greetings/ hugging or kissing (rather elbow shake);
- Avoid crowded spaces.

3.2 ENVIRONMENTAL CLEANING AND DISINFECTION GUIDELINES

When someone who has COVID-19 coughs or exhales they release droplets of infected fluid. Most of these droplets fall on nearby surfaces and objects - such as desks, tables or telephones in workplaces, door handles, rails, windows in public transportation and surfaces in homes. People could catch COVID-19 by touching contaminated surfaces or objects – and then touching their eyes, nose or mouth. If they are standing within one meter of a person with COVID-19 they can catch it by breathing in droplets coughed out or exhaled by them.

Regular cleaning and disinfection of surfaces in public places such as workplaces and public places, including transportation become critical in control of the spread of COVID-19 virus.

1) General cleaning and disinfection of high touch surfaces in public places

Routine environmental cleaning is an essential part of disinfection. Organic matter can inactivate many disinfectants. Cleaning reduces the soil load, allowing the disinfectant to work. Removal of germs such as the virus that causes COVID-19 requires thorough cleaning followed by disinfection.

The length of time that SARS-COV-2 (the cause of COVID-19) survives on inanimate surfaces will vary from hours to days, depending on factors such as the amount of contaminated body fluid, such as respiratory droplets present and environmental temperature and humidity. In general, coronaviruses are unlikely to survive for long once droplets produced by coughing or sneezing dry out.

2) Cleaning of minimally touched surfaces

Minimally touched surfaces floors, walls, ceilings, blinds, etc. should be thoroughly cleaned and cleaned as follows;

Detergent solution/wipes should be used as per manufacturer's instructions;

Damp mopping is preferable to dry mopping.

- Walls and blinds should be cleaned when visibly dusty or soiled. Window curtains should be regularly changed in addition to being cleaned when soiled.
- Sinks and basins should be cleaned on a regular basis.

3) Cleaning and disinfection of high touch surfaces

Frequently touched surfaces are a high-risk for cross-transmission by pathogens that are transferred from people's hands. Items such as door handles, light switches, lift buttons, working surfaces, tables, railings etc. are frequently touched in public places (shopping malls, public amenities, airports and other public places where people gather in numbers).

 High touch areas in public places should be cleaned and disinfected regularly and daily.

Clean general surfaces and fittings when visibly soiled and immediately.

 Routine cleaning and disinfection of high touch surfaces should be done with clean water and a neutral detergent.

 Detergents usually have no killing ability but do remove organic matter which contain microbes and thereby reduce environmental contamination.

 Detergent solution must be used as per manufacturer's instructions. Can use, with the exact choice of detergent determined by the nature of surface and likely degree of contamination.

 Detergent-impregnated wipes may be used but should not be used as a replacement for the mechanical cleaning process.

Surfaces should be thoroughly cleaned before applying disinfectants to further reduce bioburden.

4) Environmental large scale disinfection/spraying in public places

 High touch surfaces in public places should be disinfectant to reduce bioburden where large number of people usually gather;

Spray disinfectants can be used to disinfect large areas in public places, e.g. indoor buildings, communal (showers and toilets) facilities, office buildings, large transportation hubs, indoor public amenities and other places not feasible for disinfection by small scale surface disinfection.

- 5) <u>Decontamination/disinfection (cleaning) in households, workplaces of patients with COVID-19 and contacts</u>
- a) Disinfecting patient's homes

As part of your everyday prevention actions, homes should be encouraged to clean and disinfect frequently touched surfaces and objects. For example: tables, countertops, light switches, doorknobs, and cabinet handles.

The following guideline should be followed;

- Clean and disinfect bathrooms and toilet surfaces at least once daily. Regular household soap or detergent should be used first for cleaning, and then, after rinsing, regular household disinfectant containing 0.5% sodium hypochlorite should be applied;
- Clean the patient's clothes, bed linen, and bath and hand towels using regular laundry soap and water or machine wash at 60–90 °C with common household detergent, and dry thoroughly. Place contaminated linen into a laundry bag. Do not shake soiled laundry and avoid contaminated materials coming into contact with skin and clothes;
- Gloves and protective clothing (e.g., plastic aprons) should be used when cleaning surfaces or handling clothing or linen soiled with body fluids. Depending on the context, either utility or single-use gloves can be used. After use, utility gloves should be cleaned with soap and water and decontaminated with 0.5% sodium hypochlorite solution. Single-use gloves (e.g., nitrile or latex) should be discarded after each use;
- Use diluted household bleach solutions if appropriate for the surface. Check to
 ensure the product is not past its expiration date. Un-expired household bleach will
 be effective against coronaviruses when properly diluted;
- Use diluted household bleach solutions if appropriate for the surface. Check to
 ensure the product is not past its expiration date. Unexpired household bleach will
 be effective against coronaviruses when properly diluted.
- Alcohol solutions with at least 70% alcohol;
- Household cleaners and disinfectants: Clean the area or item with soap and water or another detergent if it is dirty. Then, use a household disinfectant;
- Follow the instructions on the label to ensure safe and effective use of the product.
- Perform hand hygiene before and after removing gloves;
- Gloves, masks and other waste generated during at-home patient care should be placed into a waste bin with a lid or suitable HCRW receptacle in the patient's room before being disposed of as infectious waste.

- Avoid other types of exposure to contaminated items from the patient's immediate environment (e.g., do not share toothbrushes, cigarettes, eating utensils, dishes, drinks, towels, washcloths or bed linen).
- b) Workplace disinfection; and disinfection where an employee has tested positive.

Where an employee fell sick at a workplace and found to have tested positive for COVID-19;

- Surfaces (e.g. desks and tables) and objects (e.g. telephones, keyboards) must be wiped with disinfectant;
- Surfaces to be disinfected to include (desks, telephones, keyboards and other high touch surfaces);
- All surfaces should be wiped down and washed at least two times, with 500 ppm (0.05%) chlorine solution.
- The crew disinfecting must wear gloves PPE i.e. gloves, plastic aprons). Either utility or single-use gloves must be used;
- After use, utility gloves should be cleaned with soap and water and decontaminated with 0.5% sodium hypochlorite solution. Single-use gloves (e.g. nitrile or latex) should be discarded after each use;
- The crew must perform hand hygiene before and after removing gloves.
- Avoid other types of exposure to contaminated items from the patient's work environment (pens, computers, eating utensils, dishes).
- Where an employee's vomits or has blood or other spillage, such spillages should be flooded with a disinfectant, namely chlorine solution with a concentration of 5000 ppm (0.5%) or 20x30g sachets of Biocide D Extra/10L water, covered with paper towels or absorbent material and left for at least 30 minutes before cleaning.
- Clinical Guidelines for suspected or confirmed COVID-19 disease (Version 3) must be applied to deal with suspected or confirmed case at a workplace.
- If an employee in a place that deals with customers, e.g. supermarket or public service place test positive, awareness should also be raised through media to communities who engage with that service center.
- c) Public place disinfection in case of a confirmed or suspected COVID-19 case;

Where suspected or confirmed cases, or passengers with suspicious symptoms are found in public transportation or public gathering places, terminal disinfection should be performed by professionals; The following methods should be used for terminal disinfection;

- The area should first be well ventilated with fresh air for a minimum of 1 hour;
- Hydrogen peroxide gas sterilization devices can be used for integrated disinfection of the air and the environment. The specific operation can be performed according to the equipment instruction manual.
- 0.5% peroxyacetic acid, 3% hydrogen peroxide, or 500mg/L chlorine dioxide can be adopted for air disinfection, by way of aerosol spray;

- For key areas that are contaminated, 1000 to 2000mg/L chlorine disinfectant can be applied by spraying or wiping for reaction of more than 30 minutes.
- Hand hygiene must be performed after cleaning and disinfection.

6) Recommended surface and environmental disinfectants

 70% ethyl alcohol to disinfect to disinfect small areas between uses, such as reusable dedicated equipment (for example, thermometers);

Sodium hypochlorite at 0.5% (equivalent to 5000 ppm) for disinfecting larger

spaces.

 Service providers/sprayers used for disinfection services to possess relevant skills and expertise to conduct spraying.

Chlorine releasing agent – hypochlorite (strength: 1000-10,000 ppm).

7) Use of disinfectants

Disinfectants must be used for reducing microbial contamination on surfaces and inanimate objects;

Disinfectants must be used specifically in accordance with the manufacturer's guidelines and instructions for use.

Surface disinfectants should be sprayed directly onto surfaces and wiped

systematically and carefully.

 Cleaners to be trained on the correct use of disinfectants and should be provided with personal protective equipment when using disinfectants.

Gloves should be worn when handling and preparing bleach solutions;

- Disinfectants solution should be made up daily and used mainly on hard, nonporous surfaces.
- Disinfectant solutions must be prepared daily and utilized.
- Disinfectant containers must be cleaned daily after use.

8) Application of surface disinfectants

After washing, surfaces must be allowed to dry;

 (0.05%) chlorine solution to be applied using a clean cloth. Surfaces to be sprayed and wiped down.

9) Application of spray disinfectants

Because COVID-19 infection is spread by droplets, either through coughing, sneezing, or from hands to surfaces. Outdoor areas have less risk than crowded indoor areas, in part due to ventilation. Therefore air spraying of outdoor environments is not essential. Focus should be on indoor crowded areas;

- Spray floors, walls and other internal surroundings in areas of high human
- Communal showers, toilets;

- Avoid spraying disinfectants near water sources, plants and other vegetation.
- Under no circumstances should human being be sprayed with a disinfectant.

10) Recommended frequencies for disinfection

- Workplaces should be disinfected daily;
- Public places should be disinfectant at least once a week;
- Households with patients should be disinfected daily;
- Cleaning and disinfection in public transportation to be done daily and frequently, on the start of every shift, during breaks and at the end of each shift.

11) Health care facility cleaning and disinfection

Health facility cleaning, disinfection and decontamination to be done as prescribed in the COVID-19 Disease: Infection Prevention and Control Guidelines, Version 1, April 2020.

12) Precautions for staff responsible for cleaning and disinfection

Cleaning staff should:

- Be informed to avoid touching their face, especially their mouth, nose, and eyes when cleaning.
- Wear impermeable disposable gloves and a surgical mask plus eye protection or a face shield while cleaning.
- Use alcohol-based hand rub before putting on and after removing gloves.
- Alcohol-based hand rub should also be used before and after removing the surgical mask and eye protection.

13) PPE requirement for staff conducting disinfection

For disinfecting of small surfaces/areas

- Utility or disposable gloves
- Plastic aprons; and
- Mask for smell.

For disinfecting larger spaces/spraying

Protective clothing and equipment must prevent dermal (skin and eyes), respiratory (lungs) and oral (mouth) entry of the disinfectant into the body.

- Full length overall;
- Head covering;
- Waterproof apron;
- Goggles;
- PVC Gloves;
- PVC boots;

Respirator.

14) Hygiene measures for public transportation

 Placing sanitizing hand rub dispensers in prominent places such as entrances. Making sure these dispensers are regularly refilled; and

Displaying posters promoting hand-washing and on personal measures to

prevent COVID-19 such as social distancing;

 Enforcement of social distancing measures in trains/busses and other public transportations.

15) Hygiene measures for workplaces

 Placing sanitizing hand rub dispensers in prominent places around the workplace, and make sure these dispensers are regularly refilled;

Promoting regular and thorough hand-washing by employees, contractors and

customers.

 Briefing employees, contractors and customers that if COVID-19 starts spreading in your community anyone with even a mild cough or low-grade fever (37.3 C or more) needs to stay at home. They should also stay home (or work from home) if they have had to take simple medications, such as paracetamol/acetaminophen, ibuprofen or aspirin, which may mask symptoms of infection.

 Utilizing other communication measures such as offering guidance from occupational health and safety officers, briefings at meetings and information

on the intranet to promote hand-washing.

Making sure that staff, contractors and customers have access to places where they can wash their hands with soap and water.

Display posters promoting hand-washing –these can be accessed at

www.health.gov.za; www.NICD.ac.za and www.WHO.int .

 Combine this with other communication measures such as offering guidance from occupational health and safety officers, briefings at meetings and information on the intranet to promote hand-washing.

Promote good respiratory hygiene in the workplace, and display posters promoting

respiratory hygiene.

- Ensure that and/or paper tissues are available at your workplaces, for those who develop a runny nose or cough at work, along with closed bins for hygienically disposing of them because good respiratory hygiene prevents the spread of COVID-19.
- Advise employees and contractors to consult national travel advice before going on business trips.

3.3 WASTE MANAGEMENT GUIDELINES

The management of wastes sorting and the collection of used masks should be enhanced so that wastes could be cleaned in time. The cleaning of wastes containers such as trash cans should be strengthened, and regular disinfection should be performed, either by spraying or wiping with 250 to 500mg/L chlorine disinfectant, or by disinfected wipes.

When potentially contaminated wastes are found, related local departments should be promptly contacted in accordance with relevant legislation and guidelines.

1) Infectious waste

Means waste which is suspected to contain pathogens and which normally causes or significantly contributes to the cause of increased morbidity or mortality of human beings.

2) ans waste containing discarded materials contaminated with excretion, exudates, or secretions from humans or animals who or which are required to be isolated (by the infection control staff, the attending physician or surgeon, the attending veterinarian, or the local health practitioner) in order to protect others from highly communicable or zoonotic diseases.

a) Health care facilities (public and private)

- The waste stream generated from isolation units/wards during the care of COVID-19 patients shall be treated as isolation waste and handled as health care risk waste.
- The waste shall be safely disposed of in doubled bagged (red liners) using designated single use box sets (50L or 142L) and tied when full.
- The designated single use box sets shall be marked "COVID-19" and labelled with the bio-hazard symbol/sign.
- The designated single use box sets including the double bags shall be properly sealed prior to internal collection.
- 3/4 full sealed box sets shall be removed and stored at the central storage area prior to collection for treatment and disposal.
- Health Care Waste Officers/designated representatives shall witness collection at all times of the waste.
- A separate waste manifest document shall be made available to the health care facility indicating the volumes of COVID-19 waste removed.
- The waste shall be collected and transported with other health care risk waste streams/categories provided it is clearly identified and marked "COVID-19".
- The collection, removal and transportation of the waste shall be provided by the appointed or contracted service provider.
- The treatment and disposal of the waste must be conducted at a licensed HCRW treatment and disposal facility.
- However, the use of non-burn technologies must only be at treatment facilities where shredding is either part of an enclosed treatment process or occurs after treatment of the waste to minimize potential release and/or exposure of staff or personnel to COVID-19.
- All who handle health care waste should wear appropriate personal protective equipment (PPE) and perform/observe hand hygiene practices.

b) Management of COVID-19 waste for patients under investigation

The waste stream generated in Emergency Departments during the care of suspected COVID-19 patients shall be handled as health care risk waste.

- The waste shall be safely disposed of in doubled bagged (red liners) using the designated single use box sets (50L or 142L) and marked "Suspected COVID-19".
- A temporary room or storage area shall be identified to store the waste for "Suspected COVID-19".
- If the patient tests NEGATIVE for COVID-19, then the waste shall be handled as normal/regular health care risk waste (infectious waste) instead of isolation waste.
- If the patient tests POSITIVE for COVID-19, the waste shall be handled as isolation waste.
- All the other requirements as mentioned in (a) above shall be adhered to.

c) Designated quarantine facilities

- All health care waste produced including masks, gloves, etc shall be treated as health care risk waste as per SANS 10248-1:2008.
- Provinces shall utilize the contracted/appointed service provider for that particular province to collect, remove, transport, treat and dispose of waste generated in the designated quarantine facility.
- All waste generated by quarantine individuals, staff, personnel and health care workers must be treated as health care risk waste.
- All the other requirements as mentioned in (a) above shall be adhered to.

d) Points of Entry (land, sea and air)

- All health care waste generated including masks, gloves, etc. shall be treated as health care risk waste as per SANS 10248-1:2008.
- Port Health Authority shall utilize the contracted/appointed service provider to collect, remove, transport, treat and dispose of waste generated at the specific point of entry.
- All waste generated by suspected or confirmed travelers of COVID-19, staff, personnel and health care workers must be treated as health care risk waste.
- All the other requirements as mentioned in (a) above shall be adhered to.

e) Self- isolation/quarantine at homes

- Health care waste generated from possible cases and cleaning of areas where
 possible cases have been (including disposable cloths, tissues, gloves, masks,
 etc.) shall be regarded as health care risk waste and placed in a red liner and tied
 when full.
- The red liner shall then be placed in a second red liner and tied.
- It shall be placed in a suitable and secure place and marked for storage until the individual's test results are known.
- Health care waste produced shall be placed in the suspect or patient's room awaiting collection.
- One should NOT place the waste in communal waste areas.
- If the individual test is negative, the waste shall be handled as normal health care risk waste (infectious waste) instead of isolation waste.

If the individual test is positive, then the waste shall be handled as isolation waste. Provincial/District Health Office or Municipal Environmental Health Practitioners (EHPs) shall arrange for collection of the waste. The health care worker (designated community health worker or any other health personnel) shall collect and transport the waste to the nearest public health facility for collection by the appointed or contracted service provider prior to treatment and disposal.

Proper hand hygiene practices must be performed/observed during and after the

removal of the waste.

f) Workplaces/Offices and public places

 All waste generated including masks, gloves, paper towels, etc. shall be treated as health care general waste as per SANS 10248-1:2008.

The waste shall be placed in plastic rubbish bags and tied when full.

These plastic rubbish bags shall be placed with the normal health care waste generated for collection, removal, transportation and disposal by the relevant municipality.

If health screening measures are exercised at work places/offices, all waste generated shall be treated as health care risk waste as per SANS 10248-1:2008.

If waste is treated as health care risk waste, all other requirements as mentioned in (a) above shall be adhered to.

Proper hand hygiene practices must be performed/observed during and after the

removal of the waste.

g) Reporting and response protocol where unlawful disposal of health care risk waste (HCRW) is detected

Considering the serious public health issues associated with COVID-19, the default approach to any instance where the unlawfully disposed of HCRW is detected is to remove the risk from the environment immediately. Given the uncertainties in relation to the origin of this HCRW, and despite the scale of the unlawfully disposed of waste, it will be managed as though it is contaminated by COVID-19. Since the environmental authority's regularly undertakes investigations in relation to any breaches of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), it would be prudent at this time, and considering the capacity limitations that exists within the health authorities to adopt the following protocol:

 Any instance of unlawfully disposed of HCRW that is reported to the environmental authorities must be submitted to the National Department of Environment, Forestry and Fisheries (DEFF);

DEFF will communicate these reports to the relevant officials concerned with the

management of HCRW at the National Department of Health;

 The National Department of Health will issue an instruction to the contracted or appointed service providers who are lawfully permitted to collect HCRW on behalf of the Provincial Departments of Health to respond to the area where the unlawful disposal was detected;

The HCRW must be collected with minimal direct handling and it must be placed

in adequately sized containers;

Any information and/or evidence that could link the unlawfully disposed waste to a
perpetrator must be photographed and sent to the DEFF coordinator who will then
ensure that the necessary criminal investigations ensue; and

In consultation with DEFF, the disposal option identified will depend on each

individual circumstance.

N.B. Provincial/District Health Office or Municipal EHPs shall ensure proper monitoring of the collection, removal, transportation, treatment and disposal of the waste.

Municipal EHPs shall conduct proper and thorough investigations of all suspected and/ or confirmed cases of COVID-19.

2) General waste management

- Environmental hygiene should be encouraged in communities, as part of public hygiene interventions.
- Strategies for waste removal to be implemented in areas where there is no adequate removal services.

3.4WATER, SANITATION AND HYGIENE (WASH) GUIDELINES

Upholding best WASH practices in health facilities, quarantine areas, homes and communities is also important for preventing the spread of COVID-19 and when caring for patients at home. The following WASH measures should be implemented to support the control of the spread of the virus;

- a) Keeping water supply safe ensuring access to adequate water supply in all setting for drinking and safe food preparation for patients, staff and caregivers.
 Communities should be provided with safe, constant and adequate supply of water.
- b) <u>Safe disposal of sewage</u> provision of toilet facilities, safe use and maintenance thereof is critical in the control of the spread of disease, to ensure adequate care and protecting staff, care givers and patients at homes and in health care facilities from the risk of infection. Managing and disposing of excreta safely, (ii) engaging in frequent hand hygiene using appropriate techniques after using toilet facilities and implementing regular cleaning and disinfection practices will be particularly important. Providing adequate and accessible toilets for confirmed and suspected cases of COVID-19 infection);
- c) <u>Hygiene</u> other important measures include ensuring that personal hygiene can be maintained, including hand hygiene, for patients, staff and caregivers, regularly laundering bedsheets and patients' clothing, washing of PPE to enable proper hygiene is key.

4. PUBLIC HYGIENE COMMUNICATION GUIDELINES

The main communication approaches to achieving the public hygiene promotion objectives are advocacy, interpersonal communication, and community mobilization,

supported and reinforced by mass media. Various communication mediums should be explored in increasing hygiene literacy.

The strategy therefore adopts the use of the following communication mediums for hand hygiene promotion programmes.

1) Use of mass media

Due to the ability to reach a large audience, regardless of socio-economic status or geographical area, mass media has been proven to be an effective and reliable medium for creating awareness, advocating and shaping public opinion. Mass media communication can overcome barriers of literacy and language and it is ideal for delivering simple, clear and focused messaging.

The use of mass media for hand hygiene promotion will aim to raise the political profile of hygiene promotion in South Africa and ensure that messages are distributed through a mixture of community radio, television, billboards and other effective mediums. Partnerships with key media (in print, radio, television and internet) will be leveraged to promote hygiene over the short, medium and long term through a national communication plan.

Public Service Announcements (PSAs): Appeals to be developed in appropriate messages and dissemination through radio and television.

Engaging social media: The use of social media is growing by day and is able to reach masses, particularly the youth. The use of social media, such as Facebook, Twitter, and/or Instagram. The objective is to place hand hygiene on the public agenda and a topic for discussion amongst people of all age groups, particularly the youth. Text messages will exclude illiterate people in the primary target group, so visual messages will have a greater reach.

2) Use of Information, Education and Communication (IEC) material

Hand hygiene promotion IEC material simple, targeted, tested and adapted to local context to ensure appropriateness and effectiveness.

3) Community mobilization

Community mobilization is an activity though which action is stimulated by a community itself, or by others, that is planned, carried out and evaluated by the community itself and organizations on a participatory and sustained basis to improve the health, hygiene levels so as to enhance the overall standards of living in the community.

The following mediums should be used for community mobilization;

 Public gathering places, such as religious and traditional gathering places will provide an opportunity for direct contact with the desired audience; Community events on the other hand provide will provide an opportunity to interact
with the target audience and get a better understanding of the barriers that exist
that prohibit good handwashing hygiene;

Community groups such as health support groups in health establishments will provide an opportunity for hand hygiene promotion dialogues. The dialogue among community members to deal will initiate community discussion to deal with critical issues of hygiene and also provide a platform for the community to participate in decisions that affect their daily lives;

 Public gathering places such as clinics, hospitals, churches, shopping centers, restaurants and transport hubs (Taxi and bus ranks) will provide good audience for

handwashing hygiene communication.

References

WHO.int, Water, Sanitation and Hygiene and waste management for COVID-19, March 2020.

ECDC, Technical Report on Disinfection of Environments in health care and non-health care settings, contaminated with SARS-CoV-2.

WHO.int, Getting your workplace ready for COVID-19 (WHO), 3 March 2020.

WHO reference number: WHO/2019-nCov/IHR. Quarantine/2020.1

IMPLEMENTATION PLAN

	going R12 000 000.00		To be costed by DEFF		0 To be costed by DEFF
	With immediate effect - ongoing		April 2020		April 2020
	DEFF & Provincial Environment Authorities DOH		DEFF		DEFF
public spaces; (Public ranks, train stations, airports, land borders, informal settlements, public transportation, public amenities, prisons, streets etc.)	Ensure and promote general environmental cleanliness; Ensure the removal of infectious waste from facilities and households of infected persons;	Ensure proper management of food waste from conveyances from high risk	Appointment and utilization of Hygiene Ambassadors in high risk areas for implementation of community based hygiene measures;	Integration of public hygiene measures into the following programmes;	To set up a capacity to make safe and effective hand-sanitizers, soap and masks in high risk areas; Testing of the quality of self-made soap, hand sanitizers and masks.
				•	

	Provision of raw ingredients for self- made soap, sanitizers;			
	Provide hygiene products (soap, bottled water, hand-sanitizer, masks) and education material to households. DEFF to procure?			
	Implementation of integrated vector control measures in high risk areas (e.g. placement of rodent-traps and waste management education as part of the green deeds" focus, and ensure collection and proper disposal of carcasses.			
•	Promote environmental hygiene interventions focusing on high risk areas with a focus on safe sanitation, separation of waste at source, recycling.			
•	Support public hygiene interventions at community level (through placement of DPW participants);	DPW	April 2020	Appointment of 25 000 400 participants, paid at a daily wage rate of R101 for 7 days a week;
· Panil	Appointment and placement of frontline workers for community hygiene interventions.			Three (3) months wages (R187 496 400);
				Admin Fee for NPOs at 10% (R18 749 640) Contingency fee @ 10% to cover activities such as transport, meals.

	Provision of raw ingredients for self- made soap, sanitizers;		
•	Provide hygiene products (soap, bottled water, hand-sanitizer, masks) and education material to households. DEFF to procure?		
•	Implementation of integrated vector control measures in high risk areas (e.g. placement of rodent-traps and waste management education as part of the green deeds" focus, and ensure collection and proper disposal of carcasses.		
	Promote environmental hygiene interventions focusing on high risk areas with a focus on safe sanitation, separation of waste at source, recycling.		
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	 Appointment and placement of frontline workers for community hygiene interventions. 		Three (3) months wages (R187 496 400);
			Admin Fee for NPOs at 10% (R18 749 640) Contingency fee @ 10% to cover activities such

PPEs (R20 624 604).	To be costed by Private sector			To be costed by Departments		To be costed by Municipalities	To be costed by Municipalities
	With immediate effect.			With immediate effect		With immediate effect	With immediate effect
	Private Sector			DOH; All government departments;		District and Metropolitan Municipalities	Municipalities
	Implement public hygiene measures (provision of hand washing or sanitizing services) in all public shopping malls, hotels, gyms, retail shops and public eating places;	Ensure disinfection of surroundings and high touch surfaces in all public places in all public shopping malls, retail shops and public eating places;	Implement social distancing measures in the provision of services to the public;	Implement hygiene intervention measures (provision of hygiene products and disinfection services) in all government owned public places (schools, hospitals, clinics, offices).	Implement restriction on the number of people to gather in all public places rendering public services.	Implement community hygiene intervention measures (provision of hygiene products and disinfection services) in all Municipal owned public	amenities and places. Provide directives locally on restrictions of gatherings and entry and use of public places;
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PPEs (R20 624 604).	With immediate To be costed by Private sector			With immediate To be costed by effect Departments		With immediate To be costed by effect Municipalities	With immediate To be costed by effect Municipalities
	Private Sector With in effect.			DOH; All government effect departments;		District and With in Metropolitan effect Municipalities	Municipalities With i
	Implement public hygiene measures (provision of hand washing or sanitizing services) in all public shopping malls, hotels, gyms, retail shops and public eating places;	Ensure disinfection of surroundings and high touch surfaces in all public places - in all public shopping malls, retail shops and public eating places;	Implement social distancing measures in the provision of services to the public;	cts	Implement restriction on the number of people to gather in all public places rendering public services.	jiene ovision of nfection owned public	Provide directives locally on restrictions of gatherings and entry and use of public places:
	•	•	•	•		•	•

ses the control of th	nandwasning racilities, Monitor compliance of the public and private sector on the implementation of public hygiene measures;	Monitor the management of human remains infected with COVID 19. Re-enforce the cleaning of surroundings.	Provide waste management services, which include waste removal, storage and disposal services.	Conduct public hygiene awareness NDOH supported With immediate by Municipalities effect and other government departments	Restrict entry by the public to prisons and other correctional services facilities; Correctional Services Services	Scale up nyglene measures within prisons (provision of sanitizers, soap and
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	Monitor community compliance to public gathering restrictions;			
	Provide temporary water tanks in all areas without potable water supply and handwashing facilities;			
	Monitor compliance of the public and private sector on the implementation of public hygiene measures;			
	Monitor the management of human remains infected with COVID 19.			
	Re-enforce the cleaning of surroundings.			
•	Provide waste management services, which include waste removal, storage and disposal services.			-
•	Conduct public hygiene awareness campaigns;	NDOH supported by Municipalities and other government departments	With immediate effect	to be costed by all stakeholders
•	Restrict entry by the public to prisons and other correctional services facilities;	Department of Correctional Services	With immediate effect	
•	Scale up hygiene measures within prisons (provision of sanitizers, soap and water, discourage sharing of utensils and social distancing);			

•	for inn tre	Quarantine new arrestees and inmates for 14 days before mixing with older inmates; Facilitate the testing of new inmates and treatment of infected ones where			
	ē	required. PUBLIC HYGIENE MEASURE 2			
		PERSONAL PROTECTIVE MEASURES			
•				With immediate effect	To be costed by DOH
	ā .	places;			
	ē 0	entrances and exits of health care			
23.	Þ	buildings;			
•	n a •	scale up nand hygierie beriavior promotion as part of Primary Health Care			
	Se	services.			
•	· ·	Strategically places hand hygiene			
-		pu		With immediate	
	Ε, ς	hygiene behaviour as part of school life USD	פוופרו		
	ŏ	development programmes.			
•	Ш	Ensure the availability of soap and water			
	.⊑ (in all toilet facilities in schools and ECDs;			
-	.	Strategically place hand sanitizers in			
	₫≥	premises; Monitor children and staff handwashing			
	•	practices;			
	ם נ	amondst children and staff:			

	Private sector costs	To be costed by Municipalities				
	20 March 2020	With immediate effect		20 March 2020	20 March 2020	With immediate effect
	Private sector Public transport agencies	Municipalities	3 ENSS	NDOH PDOH Municipalities	Municipalities supported by other government departments; Stakeholders (Taxi association, Food industry)	Private sector Public transport agencies.
Develop and implement school sickness policies and distribute to parents;	Ensure the availability of soap and water in all toilet facilities in shopping malls, taxi ranks, public eating places; Strategically place hand sanitizers in entrances and exits of malls and shops; Place hygiene messages in toilet	Ensure the availability of soap and water in all Municipality public amenities; Strategically place hand sanitizers in entrances and exits of public buildings, taxi ranks, Municipal public transportation:	PUBLIC HYGIENE MEASURE 3 PUBLIC EDUCATION AND AWARENSS	Develo provinc		Promote the availability of hand hygiene products and messages in public gathering places, such as toilets in taxi ranks, shopping malls and the food chain public eating places;
•				Educate the public and create	hygiene measures	•

		Empower communities with the skills to	DOH and	With immediate	
		construct simple low-cost technology for	Municipalities	effect	
		handwashing, particularly where water is	supported by other		
		scarce and appropriate handwash	departments		
		facilities are nonexistent.			
	•	Ensure the availability of soap and water	Municipalities;	With immediate	
		in all Municipality public amenities;	Home Affairs	effect	
		Strategically place hand sanitizers in	office;		
		entrances and exits of public buildings,	Taxi ranks;		
		taxi ranks, public transportation;			
		Ensure disinfection of high-touch areas			
		and surfaces.			
Forge handwashing		Identify relevant private sector hygiene	НОО	With immediate	
public-private		organizations to approach;	Stakeholders	effect	
partnerships public	•	Establish and formalize public-private	Private sector		
education and		partnership on hand hygiene behavior			
awareness activities		change approaches for short and long			
		term promotion programmes.			
		Promote space and support for private			
		sector support for government hand			
		hygiene programmes.			