WEEKLY EPIDEMIOLOGICAL REPORT

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WER SRI LANKA 2017

Water Safety Planning for small community water supplies –Part II

Task 2 -Describe the community water supply

2.1 Draw a map

The first task of the WSP team will be to understand what is in place. An easy way to do this is to make a map/flow diagram of the water supply, including relevant elements of the catchment area and the community served.

It may be helpful to develop an overview map of the entire community supply as well as detailed maps/ schematics of each water supply component. For example, a catchment map should include human activities and land uses (e.g. agriculture,

sanitation) that may contribute to microbial and/ or chemical contamination of the water source, whereas a treatment map should provide details on the treatment processes used, where particular chemicals are added.

Understanding the catchment area

A good understanding of the catchment area is an important part as it facilitates hazard identification . The catchment, or drainage basin, is a discrete area of land that has a common drainage system. A catchment includes both the water bodies that convey the water and the land surface from which water drains into these bodies .

Task 3 -Identify and assess hazards, hazardous events, risks and existing control measures

The process of hazard identification involves identifying actual and potential dangers and their causes. Hazard identification should be based on community knowledge (including historical information), recurring local events (e.g. heavy floods during heavy rainfall periods). For each component identified in the water supply map, the WSP team should identify the relevant hazards and hazardous events. Some are obvious, and others need reflection and on-site checking.

The risk is the likelihood of a hazard causing harm to exposed populations in a specific time frame and the magnitude and/ or consequences of that harm. For example the practice of open defecation creates a risk of contaminating drinking-water sources .

Task 4 -Develop and implement an incremental improvement plan

Control measures should be designed to address the significant risks identified .The team should review its available resources and the community's needs against the information from the risk assessment . Some improvements or control measures will be ready for immediate implementation at little or no cost. Others will need to be addressed over time and may require a substantial budget and additional external resources.

Task 5- Monitor control measures and verify the effectiveness of the water safety plan

It should be confirmed that the community water supply is operating as expected and that the WSP is protecting drinking-water safety and public health. Operational monitoring of control measures enables timely detection of operational and water quality problems so that action can be taken prior to the supply of unsafe drinking-water.

Monitoring programmes should aim to prevent problems and to correct faults in a timely manner. Monitoring should address both preventive (detecting risks so that action may be taken before problems occur) and remedial objectives (identifying problems so that corrective actions can be taken promptly). Any complaints about taste, colour or odour should raise concern and be investigated. Any sudden change in the local environment (e.g. due to heavy rainfall, at the beginning of the monsoon), in river flow or visible water quality (brown, cloudy, turbid water) should

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trigger increased vigilance, All operational monitoring and verification data should be documented, filed and shared with relevant stakeholders.

There may be legal or other requirements to submit reports to public health or regulatory officials. Over time, this documentation will be helpful, as results are analysed, to explain historical performance and occurrences and to show what risks occur with what frequency. This information will help to improve the continued implementation of the WSP, especially to justify investments.

Task 6 Document, review and improve all aspects of water safety plan implementation

Good information on the status of and procedures for running the water supply is essential for effective management and planning. Development of the WSP would have yielded a lot of information, for example, on the origin of the system, its design and construction, or ownership details of land on which

a reservoir or a hand pump was built. It is very important to retain copies of the documentation and to know where the original files are to be found (e.g. at the district water supply office or the land registry).

Written instructions describing steps or actions to be taken during normal operating conditions and for corrective actions when operational monitoring parameters reach or breach operational limits. These are often called "standard operating procedures" or SOPs. Additionally, emergency management

procedures should be developed for any unforeseen events or deviations that may occur.

Periodically, the team should meet to review the WSP and to learn from experiences and new procedures. The WSP should also be reviewed whenever there are significant changes in or around the community water supply, including recent land use changes. The review process is essential to overall implementation and provides the basis from which future assessments can be made.

Periodic reviews are particularly important in small community water supplies where capacity is limited and where the objective is to make incremental improvements over time to achieve national, state and community-based water quality targets or objectives.

To review the plan, the team should return to Task 1 (Engage the community and assemble a WSP team) and work through it again.

Water Helps ;

- To Keep your skin soft and beautiful
- To Keep your body cool and operating at peak efficiency
- To Prevent fatigue
- To perform Physical activities
- To maintain optimum blood circulation and mental function (the brain is 80% of water)

Table 1 : Water Quality Surveillance
Number of microbiological water samples August 2017

District	MOH areas	No: Expected *	No: Received
Colombo	15	90	**92**
Gampaha	15	90	**NR**
Kalutara	12	72	**NR**
Kalutara NIHS	2	12	**9**
Kandy	23	138	**NR**
Matale	13	78	**NR**
Nuwara Eliya	13	78	**NR**
Galle	20	120	**67**
Matara	17	102	**73**
Hambantota	12	72	**NR**
Jaffna	12	72	**103**
Kilinochchi	4	24	**23**
Manner	5	30	**NR**
Vavuniya	4	24	**NR**
Mullatvu	5	30	**NR**
Batticaloa	14	84	**46**
Ampara	7	42	**50**
Trincomalee	11	66	**NR**
Kurunegala	29	174	**81**
Puttalam	13	78	**49**
Anuradhapura	19	114	**12**
Polonnaruwa	7	42	**12**
Badulla	16	96	**85**
Moneragala	11	66	**34**
Rathnapura	18	108	**NR**
Kegalle	11	66	**27**
Kalmunai	13	78	**NR**

* No of samples expected (6 / MOH area / Month)
NR = Return not received

Source; World Health Organization 2012. Water Safety Planning for Small Community Water Supplies Step-by-step risk management guidance for drinking-water supplies in small communities.

Compiled by Dr. Shilanthi Seneviratne
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Table 1: Selected notifiable diseases reported by Medical Officers of Health 09th– 15th Sep 2017 (37thWeek)

RDHS Division	Dengue Fever		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Chickenpox		Meningitis		Leishmania-sis		WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**
Colombo	219	30317	0	45	0	3	0	25	0	31	4	96	0	2	2	14	0	0	8	291	0	23	0	1	**21**	**100**
Gampaha	245	28213	1	26	1	13	0	16	0	8	5	48	2	12	0	14	0	1	2	221	0	25	0	2	**6**	**100**
Kalutara	170	9397	1	47	0	3	1	16	0	51	27	245	0	6	1	6	0	1	6	435	3	114	0	1	**.02**	**98**
Kandy	206	11366	0	60	0	4	0	5	0	10	3	41	1	105	0	11	0	1	2	193	2	32	0	11	**12**	**100**
Matale	35	2511	0	17	0	4	0	1	0	9	0	30	0	2	0	7	0	0	1	40	0	51	0	5	**12**	**100**
NuwaraEliya	8	792	0	20	0	8	1	31	0	53	3	45	10	154	0	18	0	0	1	263	0	36	0	0	**56**	**100**
Galle	70	5341	2	44	1	13	0	18	0	16	9	259	2	54	0	5	0	1	3	322	3	56	0	1	**17**	**100**
Hambantota	48	2873	0	19	0	7	0	7	0	20	0	43	2	54	1	8	0	1	2	156	0	19	6	293	**10**	**100**
Matara	66	5642	0	30	0	8	0	3	0	5	7	159	1	21	0	6	0	1	3	189	0	6	6	117	**9**	**100**
Jaffna	75	3900	21	241	1	18	0	31	2	54	0	26	4	406	0	3	0	0	4	161	3	34	0	0	**42**	**88**
Kilinochchi	15	435	0	17	0	1	0	11	0	1	1	4	0	14	0	2	0	0	0	3	1	10	0	3	**26**	**100**
Mannar	0	507	0	5	0	0	0	2	0	1	0	2	0	2	0	0	0	0	0	14	0	0	0	0	**15**	**100**
Vavuniya	10	759	0	17	0	0	5	60	0	6	0	26	0	9	0	7	0	0	3	28	0	2	0	9	**13**	**100**
Mullaitivu	5	303	2	11	0	3	0	4	0	5	1	17	0	4	0	1	0	1	0	16	0	5	0	1	**8**	**100**
Batticaloa	33	4595	3	98	0	8	0	13	0	20	1	22	0	0	0	4	0	1	4	151	0	23	0	1	**23**	**100**
Ampara	13	773	1	21	0	2	0	1	0	1	0	16	0	1	0	4	0	0	0	163	1	36	1	4	**33**	**100**
Trincomalee	8	4680	0	22	0	2	4	12	1	21	1	19	0	12	0	17	0	0	5	136	0	20	0	10	**18**	**100**
Kurunegala	102	9427	4	65	0	9	0	3	1	45	0	54	0	24	1	18	0	2	1	412	2	63	7	124	**10**	**100**
Puttalam	75	5018	1	37	0	2	0	2	0	9	2	25	0	11	0	1	0	0	2	121	2	40	0	3	**10**	**100**
Anuradhapur	20	2464	0	32	0	3	0	1	0	12	1	58	0	15	0	13	0	1	2	324	2	60	6	194	**7**	**100**
Polonnaruwa	9	1158	1	14	0	5	0	9	0	6	0	33	0	7	0	8	0	0	2	184	0	12	0	106	**4**	**97**
Badulla	65	3134	4	82	1	8	0	7	0	5	4	92	6	93	1	53	0	1	10	309	2	161	1	13	**7**	**100**
Monaragala	62	2154	5	54	0	3	0	1	0	9	1	111	6	105	0	17	0	1	1	75	3	60	0	16	**27**	**100**
Ratnapura	160	10196	7	131	0	74	0	10	0	8	8	472	1	26	1	63	0	0	1	241	0	135	0	20	**10**	**99**
Kegalle	126	8570	2	33	0	11	0	4	0	18	7	77	0	60	0	12	0	0	6	230	1	59	0	9	**10**	**100**
Kalmune	26	2162	4	77	0	6	0	4	0	284	1	9	0	0	0	2	0	0	1	123	0	23	0	0	**12**	**100**
SRILANKA	**1871**	**156687**	**59**	**1265**	**4**	**218**	**11**	**297**	**4**	**708**	**86**	**2029**	**35**	**1199**	**7**	**314**	**0**	**13**	**70**	**4801**	**25**	**1105**	**27**	**944**	**15**	**99**

Source: esurveillance.epid.gov.lk

*T=Timeliness refers to returns received on or before 15th Septembert , 2017 Total number of reporting units 344 Number of reporting units data provided for the current week: 342 C**-Completeness

Table 2: Vaccine-Preventable Diseases & AFP

09th– 15th Sep 2017 (37thWeek)

Disease	No. of Cases by Province									Number of cases during current week in 2017	Number of cases during same week in 2016	Total number of cases to date in 2017	Total number of cases to date in 2016	Difference between the number of cases to date in 2017 & 2016
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	01	00	00	00	00	00	01	00	00	02	01	50	51	- 1.9%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Mumps	01	00	00	00	01	00	00	00	00	02	04	232	289	- 19.7%
Measles	00	00	00	00	01	00	01	00	00	02	02	171	320	- 46.5%
Rubella	00	01	00	00	00	00	00	02	00	03	00	09	07	28.5%
CRS**	00	00	00	00	00	00	00	00	00	00	00	01	00	0%
Tetanus	00	00	00	00	00	02	00	00	00	02	00	14	08	75%
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Japanese Encephalitis	00	00	00	00	00	00	00	00	00	00	00	21	15	40%
Whooping Cough	01	00	00	00	00	00	00	00	00	01	01	14	52	- 73%
Tuberculosis	96	27	07	19	12	03	03	07	26	200	135	6004	6766	-11.2%

Key to Table 1 & 2

Provinces: **W**: Western, **C**: Central, **S**: Southern, **N**: North, **E**: East, **NC**: North Central, **NW**: North Western, **U**: Uva, **Sab**: Sabaragamuwa.

RDHS Divisions: **CB**: Colombo, **GM**: Gampaha, **KL**: Kalutara, **KD**: Kandy, **ML**: Matale, **NE**: Nuwara Eliya, **GL**: Galle, **HB**: Hambantota, **MT**: Matara, **JF**: Jaffna, **KN**: Killinochchi, **MN**: Mannar, **VA**: Vavuniya, **MU**: Mullaitivu, **BT**: Batticaloa, **AM**: Ampara, **TR**: Trincomalee, **KM**: Kalmunai, **KR**: Kurunegala, **PU**: Puttalam, **AP**: Anuradhapura, **PO**: Polonnaruwa, **BD**: Badulla, **MO**: Moneragala, **RP**: Ratnapura, **KG**: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS =**Congenital Rubella Syndrome

Influenza Surveillance in Sentinel Hospitals - ILI & SARI							
Month	Human				Animal		
	No Total	No Positive	Infl A	Infl B	Pooled samples	Serum Samples	Positives
September	270	25	10	15	1086	731	0

Source: Medical Research Institute & Veterinary Research Institute

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ON STATE SERVICE

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