

Session 1: Introduction to Diphtheria agents and their genomic diversity (5 March)	Speakers	Hours
Part 1: Introduction to Diphtheria Agents (1h45)		09:30 – 11:15
A. Clinical and Diagnostics aspects (35 min) <ul style="list-style-type: none"> ○ Overview of diagnostic techniques and clinical presentation of diphtheria ○ Q&A 	Dr. Sylvie Jonckheere, MSF, Belgium	09:30 – 10:05
B. Methods and breakpoints for Antimicrobial Susceptibility Testing of <i>C. diphtheriae</i> and <i>C. ulcerans</i> (35 min) <ul style="list-style-type: none"> ○ Introduction to EUCAST methods for antimicrobial susceptibility testing of <i>C. diphtheriae</i> and <i>C. ulcerans</i> ○ Important aspect of the methodology ○ Explanation of the development of EUCAST breakpoints for <i>C. diphtheriae</i> and <i>C. ulcerans</i> ○ Q&A 	Dr. Erika Matuschek, EUCAST Development Laboratory, Sweden	10:05 – 10:40
C. Pathogens: Taxonomy of species and strain diversity (35 min) <ul style="list-style-type: none"> ○ Taxonomy of <i>C. diphtheriae</i> and <i>C. ulcerans</i>, their strains, and their genomic characteristics ○ Q&A 	Pr. Sylvain Brisse, Institut Pasteur, France	10:40 – 11:15
Coffee break		11:15 – 11:25
Part 2: Diphtheria Genomics and Molecular Epidemiology (Practical Exercises) (60 min)	Pr. Sylvain Brisse, Institut Pasteur, France	11:25 – 12:25
A. Bacterial Strain Nomenclature and Epidemiological Tracking (30 min) <ul style="list-style-type: none"> ○ Genotyping methods ○ Taxonomy of strains based on LIN codes (Life Identification Numbers) ○ Applications in epidemiological surveillance 		11:25 – 11:55
B. Practical Exercise: Genotyping of <i>C. diphtheriae</i> Strains (30 min) <ul style="list-style-type: none"> ○ Presentation of tools (live demonstration) ○ Exercises (to be done by participants between the first and second sessions) 		11:55 – 12:25
Conclusion		12:25 – 12:30
Session 2: Surveillance and Public Health Impact (7 March)		
Part 1: Correction of Practical Exercises (40 min)		09:30 – 10:10
<ul style="list-style-type: none"> ○ Live demonstration of the correction of practical exercises ○ Q&A 	Pr. Sylvain Brisse, Institut Pasteur, France	
Coffee break		10:10 – 10:20
Part 2: Outbreak response and eDAT procurement challenges (45 min)		10:20 – 11:05
<ul style="list-style-type: none"> ○ Vaccine, antitoxin, treatments ○ Recent experiences in Bangladesh and in West Africa ○ Q&A 	M. Julien Potet, MSF, France	
Coffee break		11:05 – 11:15
Part 3: Diphtheria Surveillance (60 min)		11:15 – 12:15
<ul style="list-style-type: none"> ○ National Reference Center in France (30 min), diphtheria resurgence and EURL-PH-DIPE (Activities for 2025-2031) ○ ECDC Diphtheria Genomic Surveillance and the 2022-2023 European Diphtheria event (30 min) 	Pr. Sylvain Brisse, Institut Pasteur, France Dr. Andreas Hoefler and M. Jordi Borrell Pique, ECDC, Sweden	
Conclusion		12:15 – 12:20