

# Certificate Course in Cyber Security in Healthcare (CCCH)

Batch 2: 16 - 19 January 2021



## Course Brochure

**Course Fee (INR 6,000/- inclusive of GST)**  
to be paid through payment gateway link in the  
registration form.

After payment, kindly mail the payment details to:  
[ccch@phfi.org](mailto:ccch@phfi.org)



**Click here to register**



Certificate Course in  
Cyber Security in Healthcare

For Further Information Regarding the Course, Contact:  
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# INTRODUCTION



As the healthcare sector continues to offer life-critical services while working to improve treatment and patient care with new technologies, criminals and cyber threat actors look to exploit the vulnerabilities that are coupled with these changes. While other critical infrastructure sectors experience these attacks as well, the nature of the healthcare industry's mission poses unique challenges. For healthcare, cyber-attacks can have ramifications beyond financial loss and breach of privacy.<sup>1</sup>

Despite extensive technological and legislative interventions, data breaches within the healthcare sector rose drastically in 2015. While these breaches were often attributed to external “hackers,” research indicates that the vast majority of data breaches were actually the result of careless employee behaviour. As a result, cybersecurity and medical pundits have called for a change in healthcare employees' attitudes and behaviours surrounding cybersecurity.<sup>2</sup> Cybersecurity is not just about protecting data; it is fundamental for maintaining the safety, privacy, and trust of patients. Effective cybersecurity must become an integral part of healthcare systems, a pillar of regulation, and the subject of future research strategies.<sup>4</sup>

Steps to preventing cyberattacks of EHRs include healthcare worker education, all healthcare employees should learn about cybersecurity risks and work to protect patient privacy and safety<sup>3</sup>

We must urgently develop practical standards and solutions that are specific to the healthcare sector, agree clear lines of responsibility and governance, and commit appropriate resources to the provision of adequate security<sup>4</sup>

Cognizant of the importance of cyber security in healthcare sector Public health foundation of India collaborated with InnovatioCuris to develop Certificate Course in Cybersecurity in healthcare for healthcare professionals

## References:

1. <https://www.cisecurity.org/blog/cyber-attacks-in-the-healthcare-sector/>
2. <https://journals.aom.org/doi/abs/10.5465/ambpp.2016.17127abstract>- promoting cybersecurity within healthcare
3. <https://www.myamericannurse.com/wp-content/uploads/2017/09/ant9-Focus-0n-Cybersecurity-824a.pdf>- Cybersecurity and healthcare records
4. <https://spiral.imperial.ac.uk/bitstream/10044/1/51379/2/bmj.j3179.full.pdf> BMJ 2017;358:j3179 doi: 10.1136/bmj.j3179 (Published 2017 July 06)

## PUBLIC HEALTH FOUNDATION OF INDIA (PHFI)

PHFI, a public private initiative was launched by the 14th Hon'ble Prime Minister of India on March 28th 2006 at New Delhi, India. Evolved through consultations of multiple constituencies, Indian as well as International academia, state and central governments etc., PHFI is a response to redress the limited institutional capacity in India for strengthening training, research and policy development in the area of Public Health. Structured as an independent foundation, PHFI has adopted a broad integrative approach to public health, following up with the training of numerous Healthcare Professionals under various capacity building initiatives in Chronic conditions since 2010

For more information visit: [www.phfi.org](http://www.phfi.org)

## INNOVATIOCURIS (IC)

InnovatioCuris which is commonly known as “IC” is a unique organization, which brings deep healthcare expertise, a scientific rigour on applying global innovation models & management processes by leveraging IT to deliver healthcare at an optimum cost.

In IC we have partnered with world class academic institutes, government bodies, NGOs and healthcare organisations to create a collaborative ecosystem for piloting new interventions (systems and processes) to improve healthcare delivery.

For more information visit: [www.innovatiocuris.com](http://www.innovatiocuris.com)

## CCCH BATCH-1 : 4 - 7 JULY, 2020



First batch of the training was launched during an online event : “Thought Leaders conversation on promoting security in healthcare” on 10 June organised by PHFI and IC where we had proud privilege of having Lt. Gen. (Dr.) Rajesh Pant (National Cyber security coordinator, Government of India), Hony. Brig Dr. Arvind Lal (Chairman and Managing Director of Dr. Lal Path Labs) and Dr. Harish Pillai, Group CEO, Aster DM healthcare, as the event panelists .

Course was inaugurated on 4 July '2020 by respected Lt. Gen (Dr.) Rajesh Pant (National Cyber Security Coordinator, Government of India).

Total participants trained = 42 healthcare professionals  
(including participants from state govt and PSU's)



We received overwhelming testimonials from participants wherein they mentioned that they would recommend the course to their organizations.

**Dr. Mandeep Sarma Basistha, Medical and Health Officer, Assam**

*We got a basic idea about cybersecurity in healthcare. Course is It's beneficial and I am more enlightened. My objectives were fulfilled. I like the participatory approach. I would like to conduct the same course in my organization. I believe this course can be conducted for my organization staff.*

**Mr. Saravanan Sankaran, CIO, Aravind Hospital, Chennai**

*CCCH conducted by PHFI was a unique opportunity to understand the evolving demand on Cybersecurity in Health Care. The course content was certainly beneficial and was focused on the appropriate topics for Health care Professionals. My objective was met to understand the upcoming demand on Data Security and Protection in health care from the PDPA bill. My sincere appreciation to all the PHFI facilitators and to the instructors who kept the 4-day sessions very interactive and covering the concepts without technical jargons. I believe this course can be conducted for my organization staff.*

**Dr. Daljit Singh Sethi, Medical Director. Hope Clinic. Shillong**

*Overall course was very beneficial. It made me aware of this important aspect and my Objectives of joining the course were fulfilled. The faculty and content of the course was good. I will definitely recommend this course to my colleagues*

**Dr. Binit Shekhar, Senior Deputy Chief Medical Officer, NHPC**

*Course was very well designed, perceiving the cyber threat, which is looming large over the ever-increasing use of internet in healthcare services. It's important to all the stakeholders of healthcare sector and encompasses all the people & processes. The content of the program provided a fair amount of information about the risks we are going to face in our day to day operations. The flow of the program alongside the end session quiz kept all the participants engaged and focused towards the objectives of the program. Certainly, every organization should have such useful and well conducted programs, with such knowledgeable and intelligent faculties, who made such technical subject so non-technical and easy to understand.*

[Click here to know more about Batch -1](#)

## SALIENT FEATURES



## ELIGIBILITY CRITERIA

Healthcare Professional with 2 years experience

## Primary Objective

- To provide understanding of healthcare with cyber security aspects and to help participants start security initiatives in their healthcare facility

## Secondary Objectives

- To provide basic knowledge of internet and cybersecurity
- To establish understanding on cybercrimes in health sector
- To help create cyber security policy for healthcare facility
- To help the participant reduce errors and make healthcare facilities more secure

## COURSE CONTENT

**1** Basics of Internet and Cyber Security

**2** Cybersecurity for Hospitals and Telemedicine

**3** Cyber Risk Assessment and Third-Party Cyber Risk Management

**4** Medical Device Security and Important Data Security Regulations in Healthcare

## CRITERIA OF CERTIFICATION

There will be a standardized monitoring mechanism for the course and the participant evaluation will be through a continuous internal evaluation, course work and performance in the written examination.

The criteria for successful completion of the program is as follows:

- Participation in all sessions of webinar series of 90 minutes
- Appearance in end session quiz post completion of session
- Appearance and clearance of final examination in the form of MCQ's for 20 minutes, after Module 4 (Minimum 50% marks to be obtained in exit exam to be eligible for the certificate)

## AWARD OF CERTIFICATE

### Completion Certificate

The candidate completing the training program successfully will be awarded certificate of completion which will be jointly issued by PHFI and InnovatioCuris.

### Champion certificate

\*Participants need to submit Creative assignment enhancing cyber security issues at their workplace within one-month post completion of course and will be awarded Cyber security Champion certificate jointly issued by PHFI and InnovatioCuris

## TEACHING AND TRAINING METHODOLOGY

CCCH will be offered on a webinar mode with judicious mix of case studies, end session quiz, problem solving techniques and question and answer sessions with great flexibility to accommodate participant's queries.

A comprehensive learning package including soft copy of modules and reading material links will be provided after enrolment.

## SPEAKERS



### Satyendra Verma

An Army veteran with extensive exposure to communication and Information Security during 23 years of service with the Indian Army. Post-retirement he has led important initiatives in Mobile and App technologies with startups as well as with a leading Industry body. Since 2017, through extensive interaction, he has gained unique insights on Information security in the Indian healthcare sector and designed high quality and yet affordable cyber cover for hospitals. He is a Data Privacy expert and Certified Lead Auditor for Information Systems Security.



### Sachin Gaur

He is a researcher cum entrepreneur in the space of mobile and Internet solutions. He was in the top 10 innovators in India under India Innovates Growth Programme 2013 by FICCI. He has a double M.Sc.(tech) in Mobile Security and Cryptography from Aalto University, Finland and University of Tartu, Estonia. He has worked in the past with organizations like Adobe, C.E.R.N. and in research at the Aalto University in security related topics. Also, he has a dozen patents issued/pending in USPTO apart from contributing book chapters in two books on topics of Innovation and Healthcare.