ALL INDIA INSTITUTE OF MEDICAL SCIENCES, RAJKOT, INDIA

DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY

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MAY I HELP YOU!!!

CYBER-CRIME & ITS FORENSIC IMPLICATIONS

52,974

Incidents of cyber-crime cases reported in India within 1 year

According to the NCRB data.

National Cyber Crime Reporting Portal (Helpline Number - 1930)

what is cyber-crime

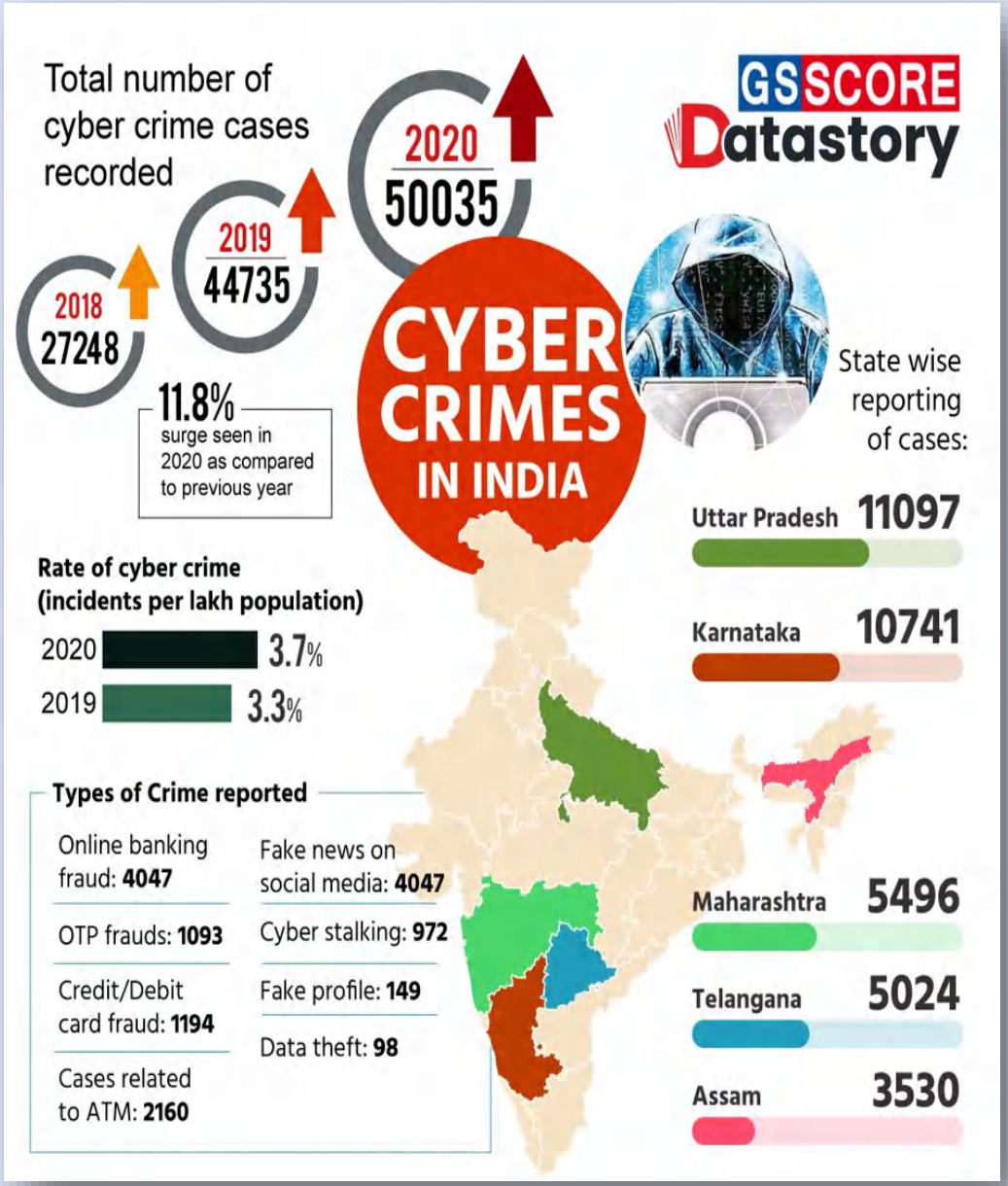
- Cyber-crime is an “unlawful act in which the computer system is used either a tool or a target or both “.
- Cyber-crime occurs when information technology is used to commit or conceal and offence.
- Cyber-crime is intentional and not accidental.

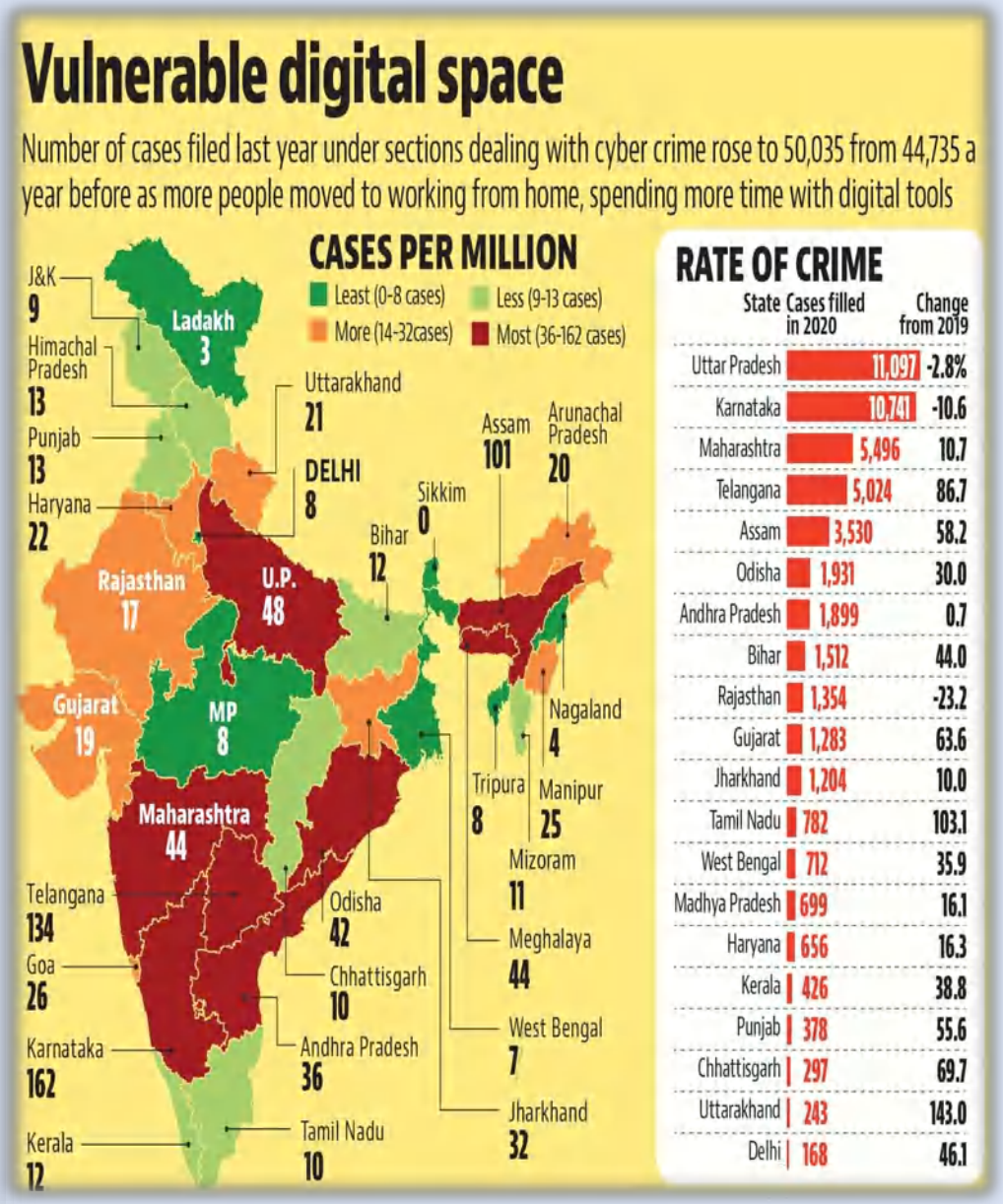
Types of cyber-crime

Cybercrime ranges variety of activities. Cyber-crime can be basically divided into three major categories:

- **Cyber-crimes against persons** like harassment occur in cyberspace or through the use of cyberspace. Harassment can be sexual, racial, religious, or other.
- **Cyber-crimes against property** like computer wreckage (destruction of others' property), transmission of harmful programs, unauthorized trespassing, unauthorized possession of computer information.
- **Cyber- crimes against government** like Cyber terrorism.

Cyber-crime statistics



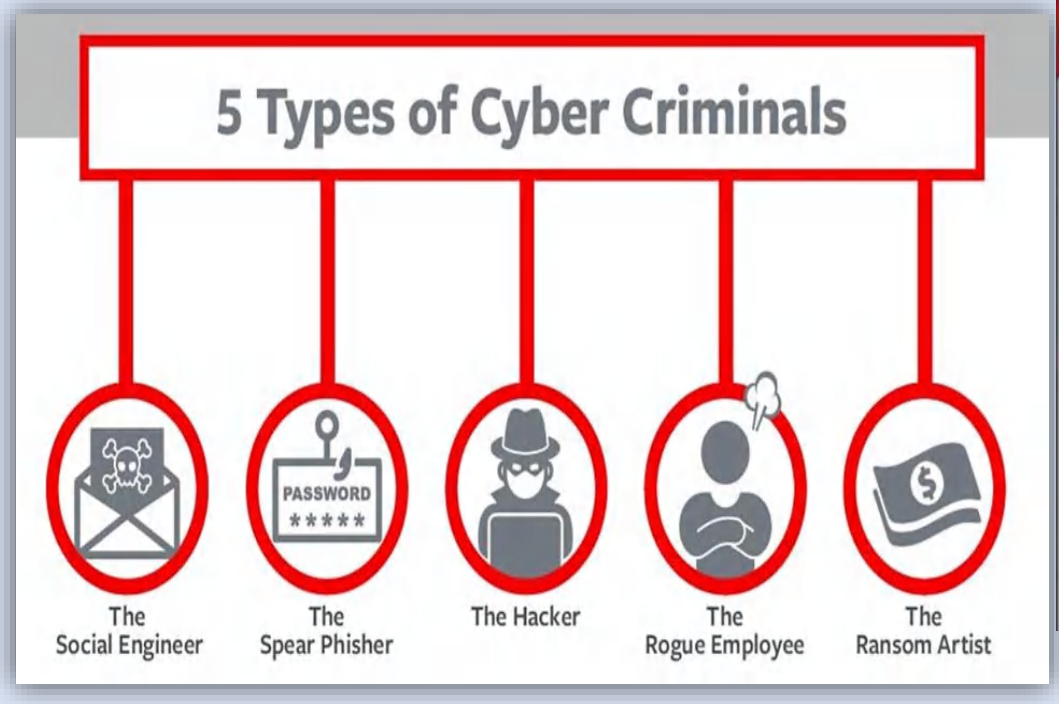


News-Paper Articles

THE PEGASUS PROJECT

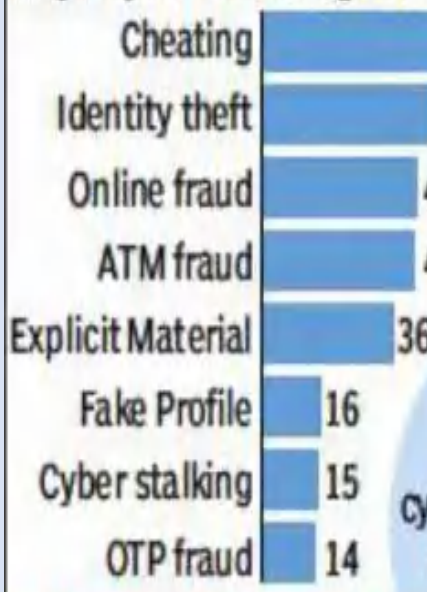
- Paris-based media nonprofit Forbidden Stories and Amnesty International accessed a leaked database of thousands of phone numbers across the world targeted by a spyware called Pegasus
- They shared the data with global media organisations as part of a collaborative investigation called Pegasus Project
- An Israeli company called NSO Group makes Pegasus, a spyware capable of extracting data from a phone
- According to the report, at least 2 Union Cabinet ministers, 3 opposition leaders, a Constitutional authority, government officials, scientists and over 40 journalists in India were targeted

Source: https://www.drishtiias.com/ Date:July 19,2021



BE SAFE ONLINE

Major cyber crimes registered in Gujarat



26.5% increase in cyber crimes reported compared to 2016

THE CHEATED

- In October, Ahmedabad resident paid Rs 61,000 for getting a refund for a bad pizza as online cheats sent him a link and duped him off the money
- In September, a 20-year-old jilted lover from Gandhinagar was arrested for making fake profile of a girl and posting obscene pictures and messages
- In June, cyber cell arrested 7 accused for creating phishing websites that mimicked the income tax website and web pages of leading banks. When victims downloaded the mobile application, it gave fraudsters access to all personal details. They could extract information from victims' phones were 'active' or in 'sleep mode'

Source: https://timesofindia.indiatimes.com/ Date: 26 Oct,2019

Cyber Forensic Steps

Steps of Digital Forensics

1. Identification

First, find the evidence, noting where it is stored.

2. Preservation

Next, isolate, secure, and preserve the data. This includes preventing people from possibly tampering with the evidence.

3. Analysis

Next, reconstruct fragments of data and draw conclusions based on the evidence found.

4. Documentation

Following that, create a record of all the data to recreate the crime scene.

5. Presentation Lastly, summarize and draw a conclusion.

Preventative Measures

Source: https://timesofindia.indiatimes.com/ Date: Oct 5, 2021

DOS & DONTS

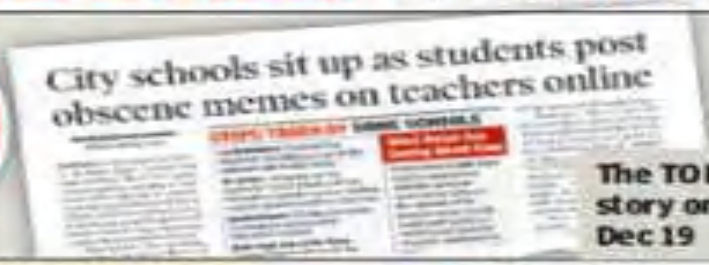
- In case you are a victim of cyber fraud, take screenshots of online transactions
- Inform police immediately about the cyber fraud so that quick action can be taken
- Do not click on any unknown link. It may forward you to a third-party application and you may fall prey to cybercrime

- Do not trust information or links received through bulk SMS service
- Contact the local office of your bank or telecom service company for required details
- Never share your details about UPI, Debit/Credit Cards and bank account with anyone
- In case you use internet banking, change your password regularly
- Do not share any OTP received on your phone with anyone
- Do not trust customer care numbers displayed by internet searches
- Always keep your social media profiles locked

Source: https://timesofindia.indiatimes.com/ Date: Dec 20, 2018

TAKE MEASURES BEFORE IT'S TOO LATE

India ranks 3rd in cases of cyberbullying



City schools sit up as students post obscene memes on teachers online

The TOI story on Dec 19

CATEGORIES OF CYBER CRIME BY KIDS

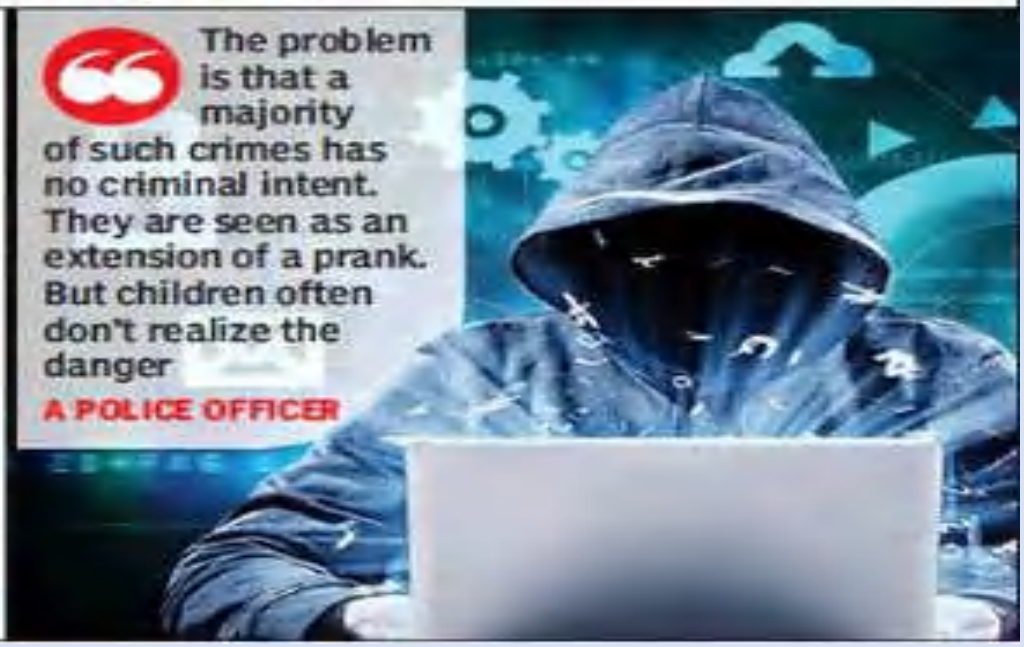
Cyberbullying | Digital piracy | Sexting

HOW TO KEEP KIDS SAFE ON CYBER SPACE

- Use parental control software
- Place the computer in a busy area of the house
- Bookmark for safety and avoid downloads from unrecognized sources
- Set limits on late-night use; establish rules and take control
- Stay in the loop

"The problem is that a majority of such crimes has no criminal intent. They are seen as an extension of a prank. But children often don't realize the danger"

A POLICE OFFICER



Cyber Law

Section Under IT Act 2000	Offence	Penalty
Section 43	Damage to computer, computer system, etc.	Compensation not exceeding one core rupees to the person so affected
Section 43A	Body corporate failure to protect data	Compensation not exceeding five crore rupees to the person so affected
Section 65	Tampering with computer source documents	Imprisonment up to three years, or with fine which may extend up to two lakh rupees, or with both
Section 66	Hacking with computer systems, Data alteration etc.	Imprisonment for a term which may extend to three years or with fine which may extend to five lakh rupees or with both
Section 66A	Sending offensive messages through communication service etc.	Imprisonment for a term which may extend to three years and with fine
Section 66B	Retains any stolen computer resource or communication device	Imprisonment for a term which may extend to three years or with fine which may extend to rupees one lakh or with both
Section 66C	Fraudulent use of electronic signature	Imprisonment for a term which may extend to three years and shall also be liable to fine which may extend to rupees one lakh
Section 66D	Cheats by personating by using computer resource	Imprisonment for a term which may extend to three years and shall also be liable to fine which may extend to one lakh rupees
Section 66E	Publishing obscene images	Imprisonment which may extend to three years or with fine not exceeding two lakh rupees, or with both
Section 66F	Cyber terrorism	Imprisonment which may extend to imprisonment for life
Section 67	Publishes or transmits unwanted material	Imprisonment for a term which may extend to three years and with fine which may extend to five lakh rupees & in the event of a second or subsequent conviction with imprisonment of either description for a term which may extend to five years and also with fine which may extend to ten lakh rupees
Section 67A	Publishes or transmits sexually explicit material	Imprisonment for a term which may extend to five years and with fine which may extend to ten lakh rupees and in the event of second or subsequent conviction with imprisonment of either description for a

IPC Section 354 – D (Stalking)

Any man who—

- **Follows a woman and contacts, or attempts to contact such woman to foster personal interaction repeatedly despite a clear indication of disinterest by such woman; or**
- **Monitors the use by a woman of the internet, email or any other form of electronic communication, commits the offence of stalking.**

Criminal Law (Amendment Act, 2013)

Offense	Punishment
Stalking	1) Upto 3 years + Fine for first conviction 2) Upto 5 years + Fine for second or subsequent conviction

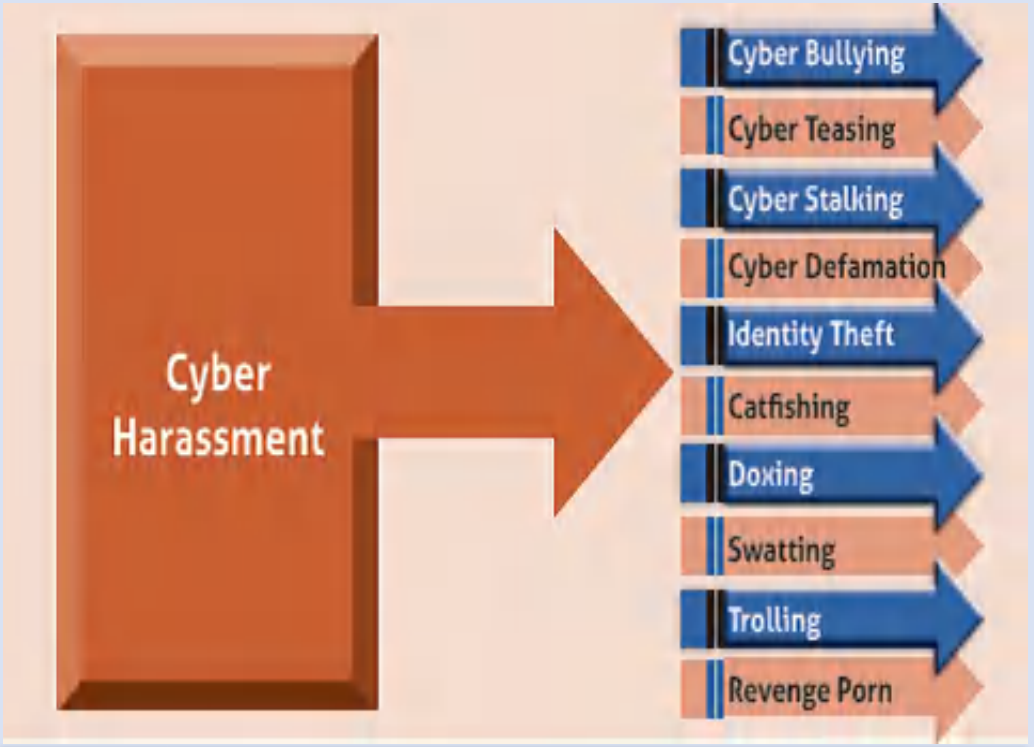
Cognizable	Bail	Trial By
1) Cognizable	1) Bailable	1) Any Magistrate
2) Cognizable	2) Bailable	2) Any Magistrate

Cyber harassment

Cyber harassment is perhaps the broadest form of cyber violence and involves a persistent and repeated course of conduct targeted at a specific person that is designed to and that causes severe emotional distress and often the fear of physical harm.

Cyber harassment is often targeted at women and girls and termed “cyber violence against women and girls” (CVAWG or Cyber VAWG) involving:

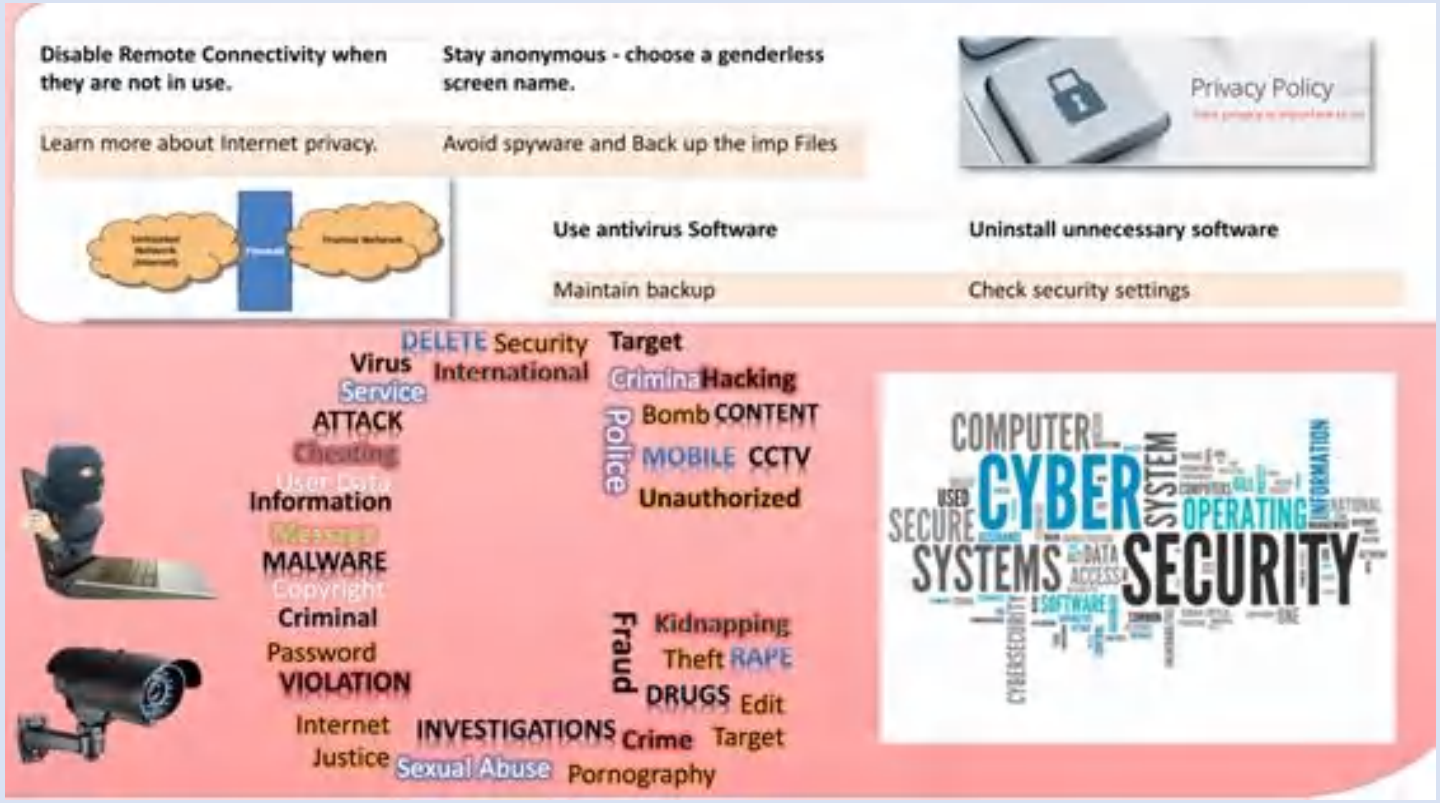
- Unwanted sexually explicit emails or other messages;
- Offensive advances in social media and other platforms;
- Threat of physical or sexual violence;
- Hate speech meaning language that denigrates, insults, threatens or targets an individual based on her identity (gender) and/or other traits (such as sexual orientation or disability).



Cyber Prevention for everyone

Cyber Security is the body of technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access. In a computing context, *security* includes both *cyber security* and physical *security*.

1) Physical Security	Protection of computer network / Internet of Things (IOT) from unauthorized access.
2) Access Control	Using Firewalls allow only authorized communications between the internal and external network.
3) Password	Password should be changed with regular interval of time and it should be alpha numeric and should be difficult to judge. Prevent the identification theft.
4) Privacy Policy	Before submitting your name, e-mail, address, on a website look for the sites privacy policy.
5) Finding weakness of network	Organization should work hard to discover security holes, bugs and weaknesses and report their findings as they are confirmed.



Conclusion

Cases of cybercrime are increases day by day. It is important to understand types of cybercrime, Do's & Don'ts applicable law & preventing measures for personal organization safety, security & Privacy.

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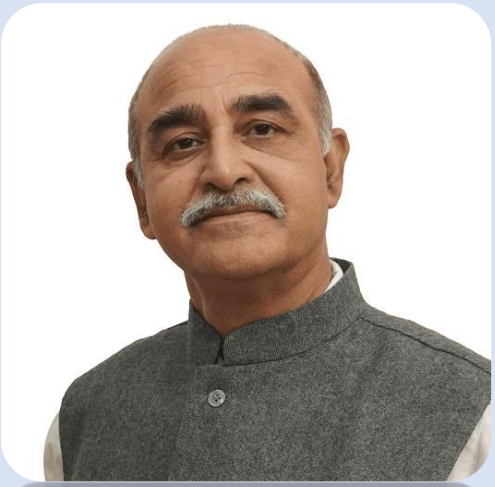

Message from Executive Director:

I heartily congratulate the Department of Forensic Medicine & Toxicology for bringing this informative newsletter. It will certainly be helpful for the community & individuals. My best wishes to the entire team…

Prof. Dr. (Col.) C.D.S. Katoch

Message from Editors:

We hope you will find this piece of work interesting and informative. Our attempt through this newsletter is to spread awareness among the community, readers and medical students about cyber-crime on various aspects. Your suggestions are always welcome.

Prof. (Dr.) Sanjay Gupta
Dr. Utsav Parekh